

**EXPERIENCES OF NURSE MANAGERS RELATING TO THE
IMPLEMENTATION OF THE COLLABORATIVE TB/HIV
ACTIVITIES AT MANAGEMENT LEVEL IN MOPANI
DISTRICT: LIMPOPO PROVINCE**

By

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DECLARATION

I declare that **EXPERIENCES OF NURSE MANAGERS RELATING TO THE IMPLEMENTATION OF THE COLLABORATIVE TB/HIV ACTIVITIES AT MANAGEMENT LEVEL IN MOPANI DISTRICT: LIMPOPO PROVINCE** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

Josephine Mazibuko

30 November 2017

DATE

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ABSTRACT

Lack of knowledge and skills among health care providers for provision of integrated TB/HIV activities for better health outcomes for co-infected patients is a public health concern. A qualitative, non-experimental, explorative and descriptive research design based on the phenomenological philosophical tradition by Heidegger to broaden hermeneutics was conducted. The study was conducted at Mopani district to explore and describe the experiences of eligible nurse managers relating to the implementation of the TB/HIV activities at management level. A purposive sample of 14 participants was recruited and consent form obtained. An unstructured interview guide, with a grand tour question, was used to conduct face to face individual interviews. Tesch's method of analysis was employed until two themes, five categories and ten subcategories emerged from the data. The major findings were on challenges experienced by nurse managers such as shortage of resources, poor planning, lack of support by management and patient related challenges. Recommendations were based on the findings to encourage staff retention strategies, adequate funding for TB control programs, support by management, co-joint planning, team work and effective tracing strategies.

Key concepts

Collaboration; experiences; implementation; management; nurses

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I dedicate this dissertation to:

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LIST OF ABBREVIATIONS

AIDS	Acquired immunodeficiency syndrome
ART	Antiretroviral therapy
CBO	Community based organisation
CHC	Community Health Centre
CPT	Cotrimoxazole
DHIS	District health information system

DOT	Directly observed treatment
HCT	HIV Testing and Counselling
HIV	Human immunodeficiency virus
IPT	Isoniazid
MDR-TB	Multidrug resistant TB
M & E	Monitor and Evaluation
MM	Middle management
NIMART	Nurse initiated management on antiretroviral treatment
NGO	Non-governmental organisation
NSP	National strategic plan
OM	Operational management
PHC	Primary health care
PMTCT	Prevention of mother to child transmission
SA	South Africa
SSA	Sub-Saharan Africa
STI	Sexual Transmitted Infection
TB	Tuberculosis
UNIADS	Joint United Nations Programme on HIV/AIDS
VCT	Voluntary Counselling and Testing
WHO	World Health Organization

CHAPTER 1

ORIENTATION OF THE STUDY

1.1 INTRODUCTION

There has been a worldwide increase in the number of tuberculosis (TB) cases especially in high human immunodeficiency virus (HIV) prevalence areas, of which South Africa (SA) is not excluded. It is noted that TB is one of the most common causes of mortality in people living with human immunodeficiency virus (PLHIV) and acquired immunodeficiency syndrome (AIDS) (UNAIDS 2014:1). Tuberculosis and HIV co-infection is high in the world, as it is highlighted in the global statistics that 20% of the 2.8 million people with TB were HIV positive (UNAIDS 2013:60). Uwimana, Jackson, Hausler and Zarowsky (2012:658) state that HIV is driving the TB epidemic in SA, with a TB/HIV co-infection rate of above 75-80%. The Department of Health reported that the TB/HIV co-infection rate of 60% suggests that SA cannot prevent or reduce the disease burden and TB mortality rate by 50% as stipulated in the 2012/16 HIV, AIDS, Sexual Transmissions (STIs) and TB National Strategic Plan (NSP) (South Africa 2012:21).

The World Health Organization (WHO) developed a policy on collaborative TB/HIV activities to establish and strengthen the mechanisms of collaboration and joint management between HIV and TB-control programmes. In 2009, due to the high burden of the TB/HIV pandemic in SA, an integration of TB/HIV management was pronounced and resulted in the development of the NSP on HIV, STIs and TB 2012-2016 to address the lack of a comprehensive and integrated approach to HIV and TB. This was identified during the implementation of the NSP for the HIV and STI program implemented during the 2007-2011 period (South Africa 2012: 21).

It has been noted that TB and HIV pandemics present a massive challenge to the health system in Sub-Saharan Africa (SSA) that is observed to be ineffective and inefficient (WHO 2014:13). The disconnected and inadequate services, particularly in low resourced settings, have contributed to poor treatment outcomes in patients co-infected with TB and HIV as well as the development of multidrug-resistant TB (MDR-

TB). When the patient develops MDR-TB, means that the TB bacilli that infected the patient is resistant to TB treatment like Rifampicin and Isoniazid (Massyn, Day, Peer, Padarath, Barron & English 2014:195).

According to the WHO (2014:5), challenges and constraints identified during the review of HIV, TB and PMTCT programmes in SA are between management and service delivery point; that is delay in “action” of distributing and supplying resources which compromises the implementation of collaborative activities. In order for TB/HIV collaborative activities to be implemented teamwork need to be enhanced. However, in the study conducted by Atkins, Lewin, Ringsberg and Thorson (2011:9) teamwork has been tempered by hierarchical relationship due to power differences. In a systematic review conducted by Njozing, Edin, San Sebastian and Hurtig (2011: 9) findings indicate that participants appreciated the integration of TB/HIV services because it was beneficial both to the staff and the patients. The major challenges expressed by participants were that the training and supervision were infrequent and caused apprehension to manage patients co-infected with TB and HIV. These participants experienced constraints of shortage of staff compared to heavy workload and inadequate staff training on how to provide integrated TB/HIV services particularly in SA and Uganda.

Study results by Carlsson, Johansson, Eale and Kaboru (2014:6) and Denegetu (2012:172) indicate that nurses responsible for enhancing adherence to TB/HIV treatment among patients in Burundi and Ethiopia respectively had mixed personal and emotional feelings. Fear and increased risks of infection particularly when patients are co-infected in an environment that lack protective material, inadequate consultation rooms to enhance ventilation and frequent drug stock outs of treatment is perceived as a threat to their own health. In the Limpopo Province, TB/HIV co-infection has been a challenge; however, great achievements have been made with regard to case finding and management. The number of TB patients with known HIV status has improved from 22.3% in 2008 to 92.2% in 2013 (National Department of Health 2015/2016:12). However, Mopani District is one of the districts in the province that has a high death rate due HIV/TB co-infection of 60% and 35.1% of the co-infected patients who are initiated on antiretroviral treatment (South Africa 2014:20). Nurse managers seem to play a crucial role in the successful implementation of the collaborative TB/HIV activities. However, this needs further empirical investigation.

Research findings from a study conducted by Uwimana et al (2012:658) support the assumption that nurse managers play a pivotal role in positively influencing the implementation of collaborative TB/HIV activities.

Since the pronouncement of the implementation of the collaborative TB/HIV activities as guided by the policy in Mopani district, the study to assess the experiences of the nurse managers related to implementing the policy is limited. Therefore, this study employed the qualitative method of inquiry to explore and describe the experiences of nurse managers both at operation the implementation of collaborative TB/HIV activities.

The study was conducted in stages. The schematic presentation of these stages is displayed in Figure 1.1 which has been adapted from Polit and Beck (2012:61).

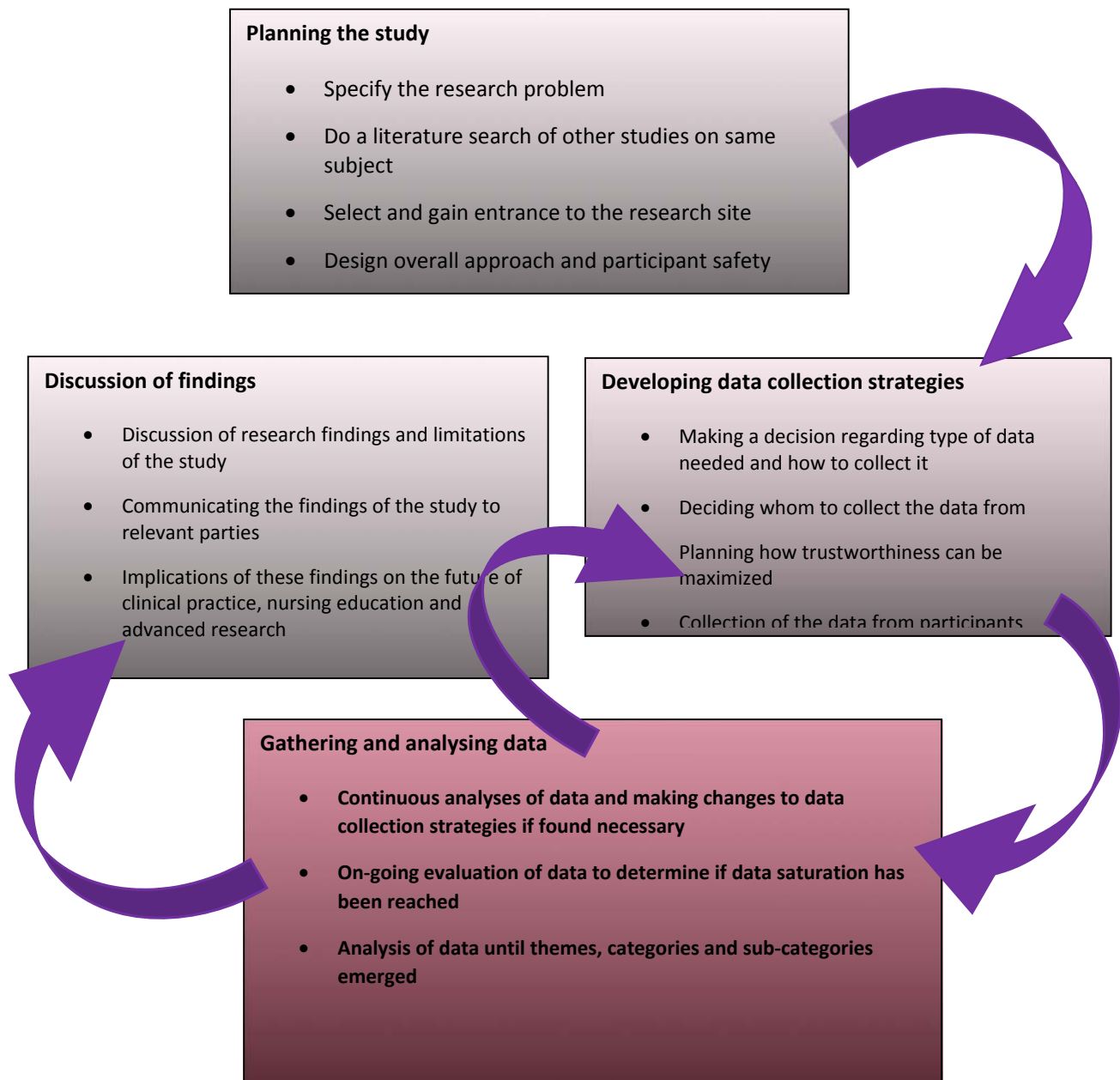


Figure 1.1 Flow of research activities for the qualitative study

(Adapted from Polit & Beck 2012:61).

The *first stage of the research involved* conceptualising and planning. A comprehensive review of the literature using sources such as journal articles from various data bases, research and discipline books, and the internet were undertaken

for contextual understanding of experiences of nurse managers relating to the implementation of the collaborative TB/HIV activities.

The *second stage* involved constructing the research methodology, which focused on a qualitative non-experimental, explorative research design, theoretical framework and the research methods. In this stage, the researcher gained the privilege of entering the sub-districts by permission and developed a rapport with the nurse managers as gate keepers (Polit & Beck 2012:67). The process of stage two overlapped to stage three due the concurrent collection of data and analysis.

During the *third stage*, the researcher was engaged in data collection, analysis and discussion of the research findings.

At the *fourth stage*, the researcher summarised the findings, presented the discussions, limitations and scope and implications of the study.

1.2 BACKGROUND INFORMATION ABOUT THE RESEARCH PROBLEM

1.2.1 Source of the research problem

According to Polit & Beck (2012:74-75), research problems or topics often originate with the researcher's passion, interest and clinical experience. In this study, as a nurse manager, the researcher became inquisitive and highly concerned about how nurse managers experience the implementation of collaborative TB/HIV activities as the first line supervisors of the process. The observation was based on the fact that the integration of TB/HIV activities and programmes at management level seemed not to be jointly planned with staff members but managed mostly vertically. A literature search on the study topic became a valuable source of more information to gain understanding of the phenomena. It was a notable observation that extensive studies have been conducted with seemingly little evidence of the demonstration of how nurse managers conceptualised or experienced the implementation of collaborative TB/HIV activities at management level for better health outcomes.

1.2.2 Background to the research problem

According to the WHO (2014:1), TB is one of the leading causes of death in HIV-infected people. At least one-third of the 33.3 million of PLHIV worldwide is infected with TB. The synergistic relationship between the TB and HIV epidemics contributes

to HIV being a key driver of the TB epidemic in SA and in SSA (Massyn et al 2014: 196). People that are co-infected with TB and HIV are 20-30 times more likely to develop active TB disease than persons without HIV. It is also stated by (Denegetu 2012:10) that most countries have seen an increase in TB case fatality rates and up to a fourfold rise in their TB caseload, even those few countries with well-organised national TB programmes. This suggest that TB control will make much headway in HIV prevalent settings unless HIV control is also achieved. South Africa carries a significant burden of HIV and TB epidemics as it continues to be the home to the world's largest number of PLHIV, which was estimated to be 6.4 million in 2012 (WHO 2012: 24). Furthermore, the country also ranks third highest in the world of TB burden (0.4-0.59 million) after India (2.0-2.5 million) and China (0.9-1.2. million), and HIV is fuelling the TB epidemic with more than 70% of TB patients also living with HIV (National Department of Health 2014:9).

The recommendations of the WHO (2012:17) policy stipulated that joint planning by varying stake holders such as particularly nurse managers should clearly define the roles and responsibilities of HIV and TB control programmes in implementing, scaling-up, monitoring and evaluating collaborative TB/HIV activities at all levels of the health system. HIV and TB-control programmes should formulate a joint training plan to provide pre-service and in-service training, and continuing competency-based education and assessment on collaborative TB/HIV activities for all health care providers (WHO 2012:17).

The participants in the study conducted by Maimela, Van Geertruyden, Alberts, Modjadji, Meulemans, Fraeyman and Bastiaens (2015:6), to explore the experiences, and challenges, barriers to and facilitators for chronic diseases management from the nurses, patients and other health care providers, perceived that knowledge gap on the management of chronic diseases is linked to lack of supervision and poor dissemination of guidelines by the provincial and district nurse managers. This requires integration of services to strengthen joint planning with nurses at grass root level as they the first point of contact for patients. The finding of the study conducted by Amo-Adjei (2013:11) indicates that coordination between TB and HIV control programmes in relation to co-trimoxazole utilization is minimal. However, the study conducted by Chehab, Vilakazi-Nhlapo, Vranken, Peters and Klausner (2013:4), indicate that the major limitations were related to lack of in-depth assessment of

programme managers. Whereas, health care providers' expresses feelings that although the strategy of TB/HIV programme collaboration and integration can be successful, limited medical staffing resources and scale-up challenges remain affecting nursing staff moral negatively. Chehab et al (2013:4) further indicate that, although the strategy of TB/HIV programme collaboration and integration is provided, more efforts should be emphasised to support staff who implements the national policies. The participants' responses in a study conducted by Pope, Atkins, DeLuca, Hausler, Hoosain, Celentano and Chaisson (2010:241) state that the implementation of TB/HIV collaborative activities has been hampered by health system barriers emanating from managerial, structural, organisational, and financial systems that appeared to contribute to difficulty in setting priorities which in turn contribute to staff turnover.

The findings on the lessons learned in the scaling up TB/HIV collaborative activities in Cambodia indicate that, nurses were concerned that implementing TB/HIV collaborative activities could increase staff workload and possibly impact service quality. Lack of training is compounded by a decentralised TB program that provides diagnostic and treatment services in the periphery, beyond the direct reach of current voluntary counselling testing for HIV (VCT) services (WHO 2014:3). According to UNAIDS (2013:8), 53% of countries have taken active steps towards either fully integrating HIV/TB services or strengthening joint service provision at management level. The degree of HIV/TB integration varied considerably, ranging from fully integrated service delivery to the addition of specific services.

The South African government responded to ensure that the integration of TB/HIV in the health system is strengthened by developing and communicating guidelines and strategies for planning. Nonetheless, TB/HIV integration remains poorly implemented (Churcyard, Mametja, Mvusi, Ndjeka, Hesseling, Reid, Babatunde & Pillay 2014:4). In SA a need was identified to integrate HIV and TB services in order to scale-up timely diagnosis and treatment of HIV/TB co-infections (UNAIDS 2013:99).

Mopani District in Limpopo Province had an HIV prevalence of 25% in 2011 which was the second highest to Waterberg District with a prevalence of 27.3%. Tuberculosis / HIV co-infection was at 70% in the District (Mopani DHIS 2014), which

calls for joint planning and integration of services at management level to achieve the overall purpose of decreasing the burden of disease related to HIV and TB epidemics.

1.2.3 STATEMENT OF THE RESEARCH PROBLEM

A problem statement clearly describes the problem and motivates the need for a study by developing a logical argument. Although a research problem is a troubling condition, the purpose of research is however to make a contribution towards solving that problem (Polit & Beck 2012:73). Hofstee (2006:85) states that if there is not a problem, no new knowledge can be found. Researchers do need to state exactly what the problem is, why it is a problem, what the different aspects to the problem are, what has been done in the past to solve this problem and why has it not been enough?

The WHO has developed policy on collaborative TB/HIV activities as guidelines for national programmes and other stakeholders on how to implement and scale-up collaborative TB/HIV activities at areas with high TB/HIV co-infection. One of the recommendations is to establish and strengthen the mechanisms for delivering integrated TB and HIV services (WHO 2012:14). Despite the available policies and guidelines for collaborating TB/HIV activities, there seem to be gaps observed in the manner in which integration of TB/HIV activities are planned and coordinated in the Mopani district at management level. The review findings done by the WHO (2014:33) indicate that, even though integration of TB/HIV is successfully functional at primary health care, (PHC) settings, it has however, been noted that at management level integration is not well defined. Instead integration tends to depend on individuals rather than the system as a whole WHO (2014:33).

Nansera, Bajunirwe, Kabakyenga, Asiimwe and Mayanja-Kizza (2010:316) in their study of opportunities and barriers for the implementation of integrated TB and HIV care in lower level health unit in Ugandan district state, their findings report that despite the availability of policies and guidelines to carry out joint TB/HIV planning to integrate the delivery of TB and HIV services, integration is still a challenge for the managers. Furthermore, Nansera et al (2010:316) identified lack of knowledge and skills among health care providers for provision of integrated TB/HIV activities and nursing care in general. This has implications on the role of nurse managers as supervisors of the initiative. Although the national guidelines are available, their absence to direct the provision of integrated TB and HIV care in a single sitting and

lack of capacity to diagnose both TB and HIV were given by the participants as barriers to provision of integration. The findings of the research conducted by Arjun (2011:110) about the experiences of enrolled nurses caring for MDR-TB patients indicates that participants needed to be supported especially by managers in their work environment as they were managing patients suffering from MDR-TB. Participants indicate that management supported them rarely and this led to the perception that management did not understand the feelings and experiences of the nurses (Arjun 2011:110).

There are seemingly few studies with regard to how nurse managers conceptualise and experience the implementation of collaborative TB/HIV activities in Mopani district especially at management level. Lack of role clarification and lack of common understanding of the concept of integration of the initiative among managers and health care providers contribute to poor implementation.

Therefore, the research theoretical statement of this study was “What are the experiences of nurse managers relating to the implementation of collaborative TB/HIV activities at management level”?

1.3 AIM OF THE STUDY

1.3.1 Research purpose

A research purpose is defined as a clear, concise statement of the specific goal or aim of a study, which is generated from a research problem (Grove, Burns & Gray 2013:74). Creswell (2014:123) defines a research purpose as a statement that establishes the intent of the entire study and it needs to be clear, specific and informative. The purpose of this study was to explore and describe the experiences of nurse managers relating to the implementation of collaborative TB/HIV activities at management level in the Mopani District, Limpopo Province.

1.3.2 Research Objectives

Bowling (2009:152) distinguishes the difference between aims and objectives as objectives being the operational tasks which one has to carry out in order to meet the aims. An objective to a qualitative study as defined by Burns and Grove (2009:166) is described as a clear, declaring statement that is expressed in the present tense.

In order to answer the research question, the objectives of this study were to:

- Explore and describe the experiences of nurse managers in relation to the implementation of collaborative TB/HIV activities at management level.
- Identify the barriers that hinder the nurse managers to implement the collaborative TB/HIV activities at management level

1.4 SIGNIFICANCE OF THE STUDY

The findings of this study will be used as a guideline and a sounding board to sharpen the role of nurse managers who implement and supervise the collaborative TB/HIV activities. They will also be utilized to update TB/HIV policies, treatment and procedures for the improvement of service delivery in context. Nurse managers at work places can be in-serviced with advanced training to enhance a positive experience of the initiative. They will also contribute to the existing body of nursing knowledge and other nursing scholars will be able to draw from this study for further hypothesis development and research. The study may be replicated using the quantitative approach with larger populations to further explore the phenomena as an on-going process for better health outcomes.

1.5 DEFINITIONS OF KEY CONCEPTS

The conceptual and operational definitions of this study are:

Collaboration

Collaboration is defined as a group of people working together in partnership towards reaching a common goal (Oxford Advanced Learners Dictionary 2010, sv “collaboration”).

In the context of this study, the concept collaboration was used interchangeably with integration where coordination and planning of TB/HIV activities are anticipated to be done jointly by the operational and nurse managers responsible for managing TB/HIV activities towards a common goal.

Integration

Integration according to the WHO, as cited by Reynolds and Sutherland (2013:4), is defined as “combining different kinds of services or operational programmes to ensure and maximise collective outcomes” whereas the, Oxford Advanced Learners Dictionary (2010, sv “integration”) refers to integration as the act or process of mixing / harmonising people who have previously been separated. According to Scott and Sanders (2013:1), integration is a logical step towards greater health system efficiency and a more patient-cantered approach.

In this study, integration refers to activities that are jointly planned and coordinated by nurse managers to achieve a common goal of implementing collaborative TB/HIV activities at management level.

Experiences

Experiences are defined as the process of doing and seeing things and having things happen to you. It is practical knowledge, skill or practice derived from the direct observation of participation in events or particular activity (Free Merriam Webster Dictionary 2014, sv “experiences”). According to the Oxford Advanced Learners Dictionary (2010, sv “experience”), is defined as the knowledge and skill that one has gained through doing something for a period of time. The synonyms from Thesaurus of experience are knowledge, understanding, familiarity, know-how, practise, capability, involvement and practice.

In this study, experience refers to the manner in which nurse managers understand the know-how and has capability and supervising the implementation of the Collaborative TB/HIV activities at PHC level.

Implementation

Implementation especially in research refers to the process where planned interventions and recommendations are put into practice in order to achieve an expected outcome (Blackwell’s Nursing Dictionary 2005, sv “management”).

In this study, implementation meant what nurse managers were expected to plan and put into practice for the purpose of collaborating TB/HIV activities for better health outcomes.

Management

Management is defined by Blackwell's Nursing Dictionary (2005, sv "management") as division of a company or group that organises the rest to making things to run effectively and efficiently through leading and managing other people. It is also defined by the Cambridge Advanced Learner's Dictionary (2013, sv "management") as a control and organisation of something. The synonym of management is administration or supervision.

In this study, management meant the leadership and supervision role in acted by both the operational and managers on the implementation of the collaborative TB/HIV activities.

Nurse

Nurse in the Nursing Act, Act No. 33 of (2005:34) is defined as person registered in a category under section 31(1) in order to practice nursing or midwifery (South Africa 2005. Nursing Act (Act No. 33 of 2005:34).

Nurse Managers refers to nurses providing health administrative management services, having acquired qualifications as a nurse and registered with the South African Nursing Council (South Africa. 2005. Nursing Act (Act No. 33 of 2005:34).

It this study, nurse managers referred to middle management managers (MMs) and operational managers (OMs) who were appointed to coordinate and implement HIV and TB–control activities at district and sub-district level. Middle management managers, are those working at the district and sub-district level for coordinating, planning, monitoring and evaluating the program. The operational nurse managers are the implementers of the initiative at grass root level.

1.6 THEORETICAL FRAMEWORK OF THE STUDY

Qualitative studies are not necessarily based on a particular theoretical framework, rather they contribute to the development of hypothesis substantial theories and empirically based conceptualisation of phenomena. Meta-theoretical assumptions were postulated which assisted the researcher on her thinking, data collection and analysis processes. These were teleological, ontological, epistemological, and methodological assumptions.

1.6.1 Meta –theoretical assumptions

Meta-theoretical assumptions are based on a paradigm, a world view, or a general perspective on the complexities of the world (Polit & Beck 2012:11). According to Polit and Beck (2012:12), meta-theoretical assumptions are basic principles that are assumed to be true based on logic and reason, without proof or verification. In research studies, assumptions are embedded in the philosophical base, study design and interpretation of findings (Burns, Grove & Gray 2013:37). Assumptions influence the logic of a study and their recognition leads to more rigorous study development. In this study, the meta-theoretical assumptions that were clarified are ontological, epistemological, teleological and methodological assumptions.

1.6.1.1 *Ontological assumptions*

Ontology is defined by Polit and Beck (2012:13) as the “study of being or reality”. It is concerned with “what kind of the world we are investigating, with the nature of existence, with the structure of reality as such”. Guba and Lincoln (1989:83) state that the ontological assumptions are those that respond to the question of ‘what is there that can be known. Ontological assumptions of this study were that:

- Multiple realities exist with regard to experiences of health care providers in the context of implementing initiatives and guidelines that are from government structures and authentic bodies such as the WHO or contextual.
- Being or reality is constructed and interpreted differently based on lived experiences of an individual in a dynamic and complex world through interaction with others and wider social.
- Human beings are social beings who have their own thoughts, interpretations and meanings in their own real world.

1.6.1.2 *Epistemological assumptions*

Epistemology is ‘a way of understanding and explaining how we know what we know’ (Polit & Beck 2012:13). Mouton and Marais (1994:14) as a classic source on this phenomenon regard epistemic dimension as the embodiment of the ideal of science, the quest of truth. It is ‘concerned with providing a philosophical grounding for deciding

what kind of knowledge are possible and how we can ensure that they are both adequate and legitimate. In this study, the epistemological assumptions were that:

- Qualitative interviews assist researchers to elicit information for a better understanding and meaning of phenomenon as experienced by individuals.
- Qualitative research assist researchers to investigate empirically what kind of knowledge is valid and how can we make sense of existence or reality in a particular context.

Theories inductively generated from data are likely to offer insight, knowledge, enhance understanding and provide a meaningful guidance

1.6.1.3 *Teleological assumptions:*

Telos derives from the Greek word which means goal or aim (Mouton & Marais 1994:13). Teleological dimension is explained as an inclination to desire the acquisition of knowledge which stems from a fascination with occurrences (Lor 2012:7; Mouton & Marais 1994:13). The teleological assumptions of this study are that:

- These assumptions in this study referred to the theory of morality and standards that derives duty or moral obligation from what is good or desirable as an end or outcome to be achieved

1.6.1.4 *Methodological assumptions*

According to Mouton and Marais (1994:15), methodology is “the strategy, plan of action, process or design lying behind the choice and use of particular methods and linking the choice and use of the method to the desired outcome”. While Polit and Beck (2012:13) indicate that methodology provides the “how” of research. In other words, how should research be planned, structured and executed to comply with the criteria of science (Mouton & Marais 1994:15). It refers to the logic of implementing science methods in the study of reality. This study was qualitative in nature and focused on subjectivity and values as were expressed. Methodological assumptions regarding this study were as follows:

- Human beings use language to attach meaning to the phenomena and communicate the meaning to others.
- Qualitative research supports naturalistic inquiry to collect narrative data on reality, which is constructed by people.
- In-depth interviews are ideal in conducting a qualitative inquiry into a phenomenon.

Inductive reasoning was used to make inferences from the specifics of the findings to the general premises. The constructivist paradigm assumption was used as it was more suitable for the qualitative inquiry. The constructivist study relied on the action between the participants and the researcher in order to understand the meaning of the phenomenon which was the experiences of nurse managers implementing collaborative TB/HIV activities.

1.7 Research setting

According to Streubert and Carpenter (2011:27), setting refers to the field where the research will be undertaken. The study took place in Mopani district in Limpopo province of SA which has five sub-districts with 91 clinics, 8 Community Health centres (CHC) and 6 district hospitals. The context has a staff establishment of 88 operational nurse managers(OM) and 25 middle management managers (MM). Each sub-district has a turnover of an average 1233 per of TB/HIV co-infected patients who were on treatment and 452 who were missed and were not given treatment as per the statistics in 2015/2016 (Department of Health 2015/2016:15). Further details of the settings are discussed in chapter 3.

1.8 RESEARCH METHODOLOGY

The research methodology of this study comprised of the research design and the different research methods and techniques that were used to investigate the research problem.

1.8.1 Research design

A research design is a set of logical steps, an overall plan the researcher will take to answer the research question and research objectives (Polit & Beck 2012:66), whereas Burns and Groove (2008:696) define research design as “the specific structure within which the study is conducted”. This study used a qualitative, explorative and descriptive research design based on the phenomenological philosophical tradition by Heidegger to broaden hermeneutics (Reiners 2012:1). Hermeneutics is a philosophical approach that enabled the researcher to understand the phenomenon (Holroyd 2015:11).

The phenomenology tradition focused on the experiences of nurse managers (Polit & Beck 2012:737). The focus of phenomenological inquiry was what nurse managers experienced in regard to the study phenomenon or other and how they interpreted and put meaning to those experiences. This study as a phenomenological research attempted to understand participants’ perceptions, perspectives and understandings of their situation or phenomenon as nurse managers. The phenomenological research philosophy was used to guide the study particularly during data collection, analysis and discussions. The phenomenology approach has been chosen because it focused on exploring about what life experiences of nurse managers were like in the work place and what they mean to them (Polit & Beck 2012:56). The researcher implemented the basic phenomenological actions that included intuiting, *describing* and *analysis* during the descriptive phenomenology analysis process (Brink, Van der Walt & van Rensburg 2013:122; Polit & Beck 2017:471).

1.8.2 Research methods

Research method as a concept, is defined by Polit and Beck (2012:741) as the techniques researchers use to structure a study, to collect and analyse all generated data relevant to the research question. Research methods that were followed in this study included population, population sample and sampling technique, data collection and analysis, ensuring trustworthiness and ethical considerations.

1.8.2.1 Population

A research population is defined as the entire aggregation of cases having some common characteristics in which a researcher is interested (Polit & Beck 2012:273). In this study, population has been clearly defined in respect of person, place or context and time as well as other factors relevant to the study (Joubert & Enrlich 2010:94). These types were the universal, target and accessible populations. The universal population of this study were all nurse managers in the Mopani District. The target population referred to the entire population of nurse managers who met the inclusion criteria and the findings will be applicable to them. The accessible population were all nurse managers that were available on the day of data collection (Polit & Beck 2012:744).

Inclusion and exclusion criteria

According to Polit & Beck (2012: 274), *inclusion criteria* are characteristics that a person must have in order to be allowed to participate in a study. The inclusion criteria for this study was the nurse managers in Mopani district, both male and females who were 30 years of age or above. Only those who had two years' experience at middle and operational management level and coordinating and implementing the collaborative TB/HIV activities and were willing to give consent to participate in the study.

Exclusion sample criteria are characteristics that can cause a person to be excluded from the target population (Burns & Grove 2009:345). The exclusion sampling criteria in this study was the nurse managers who had less than 2 years' experience in the management position coordinating and implementing the collaborative TB/HIV activities. Those who were not willing to give consent to participate in the study even if they met the criteria were excluded.

Sample and sampling

A sample is a part or fraction of a whole or subset of a large set, selected by the researcher to participate in a research study (Polit & Beck 2012:279). Sampling is a process of taking a small group of people from the population who are representative of the whole population (Polit & Beck 2012: 275). In this study, purposive sampling method was used to recruit participants. Purposive sampling is a non-probability sampling method in which the researcher selects participants based on personal

judgement about which ones will be most informative, or a form of sampling done in a strategic way so that those sampled are rich with information relevant to answer the research question (Bryman 2012:186; Polit & Beck 2012:739).

Sample size

In qualitative studies sample size is not predetermined. Sample size was determined by data saturation as in this study it occurred at the 14th interviewee.

1.8.2.2 Data collection

In this study, data collection referred to the gathering of data which addressed the research question and objectives. It was a process whereby the researcher collected information from the research participants face to face through in-depth unstructured individual interviews (Polit & Beck 2012:725). The theoretical statement that was asked was “What are your experiences as a nurse manager in relation to the implementation of collaborative TB/HIV activities?” An interview guide was used to collect data. A digital tape recorder was used to capture the interviews verbatim. The transcripts were typed by the researcher and subjected for qualitative analysis.

Pre-testing

The research instrument for this study was pre-tested by interviewing three operational nurse managers who were eligible. The research instrument was tested prior to the official data collection to determine the extent to which questions were appropriate and accurate to answer the objectives of the study. The procedure assisted the researcher to determine which questions needed clarity, rephrasing or refinement. After the pre-testing process there was no need to change, correct, and / or adapt the main question.

1.8.2.3 Data analysis

Data analysis is defined by Polit and Beck (2012:725) as a process of speculation, fitting data together, making the invisible obvious and verification of data. In this study, the process was used by the researcher systemically to organise and synthesise the research data making inferences on the study phenomenon. Data was analysed concurrently with data collection (Brink et al 2013:184). Data management and analysis began immediately. Transcripts were typed by the researcher verbatim which

was a laborious task. Data saturation was reached during the 14th interviewee. Tesch' (Creswell 2014:198) qualitative method of analysis was employed. Two themes, five categories and ten subcategories emerged from the data and the findings are presented in Chapter 4.

1.9 MEASURES TO ENSURE TRUSTWORTHINESS

Trustworthiness according to Lincoln and Guba (1985:290) refers to the quality value of the final results and conclusions reached in a qualitative research. In qualitative research rigor is measured by its trustworthiness or the extent to which the findings are true to the data collected and analysed (Polit & Beck 2012:583). Lincoln and Guba (1985:290) identified criteria of credibility, transferability, confirmability and dependability to encompass trustworthiness.

This section is discussed in detail in chapter 3.

1.10 ETHICAL CONSIDERATIONS

Ethics is defined as system of moral values that is concerned with the degree to which research procedures adhere to professional, legal and social obligations to a study (Polit & Beck 2012:727). Ethical considerations in this were ensured by demonstrating respect of the rights of the study institution, participants and scientific integrity.

This section is discussed in detail in Chapter 3

1.11 LAYOUT OF THE STUDY

Table 1.1 Structure of the dissertation

CHAPTER	TITLE	CONTENT DESCRIPTION
1	Orientation of the study	The introduction of the study, overview of the research problem, theoretical statement, purpose and objectives and the significance of the study. The theoretical foundation of the study, research design and study methods were briefly introduced.
2	Literature view	A comprehensive search for literature on the topic which was under investigation and information on what is published or discussed in the literature about the phenomenon.
3	Research methodology	The overall plan for addressing the research question and problem, objectives, including the setting, population, sampling and sampling technique, sampling size, data collection and data analysis, ensuring trustworthiness and ethical considerations.
4	Data representation, analysis and interpretation	Presentation, analysis and interpretation of the research findings.
5	Discussions, conclusions, limitations and scope and implications	Discussions, conclusions, limitations and scope and implications were presented based on the research findings.

1.12 CONCLUSION

This chapter provided a comprehensive overview and served as an introduction and orientation to the study. A brief discussion was used to describe the background information of the research problem with regards to the experiences of nurse managers in relation to the implementation of the collaborative TB/HIV activities.

The meta-theoretical assumptions were noted respectively as epistemological, ontological, teleological and methodological and have been outlined. All key terms have been conceptually and operationally defined. The research design and method have been briefly introduced. The research design that was discussed in this study was a qualitative, non-experimental, explorative and descriptive. Research methods were introduced which included the study population, sampling and sampling technique, sample size, data collection and analysis.

Ensuring trustworthiness and ethical considerations were also outlined and are discussed in more detail in chapter 3.

The literature review is discussed in chapter 2.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

Literature review is a critical summary of a research on a topic of interest, often prepared to put a research problem in context (Polit & Beck 2017:733). Brink et al (2013:54) posits that relevant literature review is conducted to generate a picture of what is known and unknown about a particular topic. There are different opinions with regard to conducting literature review in qualitative research prior to collection of data. Other proponents of the paradigm explain that some qualitative researchers will not investigate deeply into the literature until their topic has emerged over time during the research process. There is however a disagreement among qualitative researchers about the role of the literature review in the research process in this regard (Polit & Beck 2012: 61). According to Gay, Mills and Airasian (2006:29-44), some qualitative researchers have argued that reviewing the literature curtails inductive analysis using induction to determine the direction of data collection and analysis and should be avoided at the early stages of the research process.

Since this is a phenomenological study that deals with experiences of people, it was therefore imperative to conduct literature review for better conceptual clarity and thinking, especially because of scarcity of studies on this phenomenon (Polit & Beck 2017: 87). Brink et al (2013:54-55) indicate that in phenomenological research literature review is purposed to compare, build bridges and combine findings from the study with the literature to determine and validate current knowledge of a phenomenon.

Literature review was conducted by hand and electronically to determine what is known and unknown about experiences of nurse managers relating to the implementation of the collaborative TB/HIV activities (Brink et al 2013: 54). This chapter was at the first stage of the research process and involved conceptualising and planning. A number of concise sources related to the study phenomena were consulted such as nursing and medical research journals mostly as internet sources, dissertations, thesis, research books, the WHO policy and guidelines documents and reports. Sub-sections discussed are - the purpose of literature, scope of the research

review and emergent themes from the literature related to the topic of the underway study.

2.2. THE PURPOSE OF LITERATURE REVIEW

As a phenomenological study, the purpose of the literature review was to expand the researcher's understanding of the phenomena from multiple perspectives (Polit & Beck 2012:94). Brink et al (2013: 54) say the rationale of a literature review is to clarify the reader about the phenomenon under study. In this study, the researcher concurred with some of the researchers who suggest that review of related literature early in the qualitative research process is important. The literature review in this study served the following purposes as it:

- demonstrated the underlying assumptions (propositions) behind the research problem, objectives and the research question of this study.
- provided a way for the researcher to base the study on sound well reviewed studies on “intellectual traditions” such as phenomenology that supported the arguments logically (Gay et al 2006: 29-44; Polit & Beck 2017:59).

2.3 SCOPE OF THE RESEARCH REVIEW

The existing information reviewed related to the study phenomena was limited and focused mainly on the systematic review of the implementation of the WHO policy on the implementation of the TB/HIV collaborative activities. Various research reports of dissertations, systematic reviews, and articles of studies conducted globally, SSA countries, and SA related to the topic of this study were included but no studies conducted in Mopani district were identified. A topical approach was used in presenting this section of the study.

2.4 EMERGENT THEMES FROM THE LITERATURE REVIEW

The key themes that were identified from the literature review were TB/HIV co-infections, rationale for integration of collaborative activities, opportunities for integration, collaborative TB/HIV activities, models of integration, implementation of the integration, feasibility and effectiveness of TB/HIV integration and experiences of nurse managers.

2.4.1 TB/HIV co-infection

Tuberculosis and HIV co-infection is when people have both HIV infection and also either latent or active TB disease (Kanabus 2017:1). When someone has both HIV and TB, each disease speeds up the progress of the other. Together TB and HIV form a lethal combination, with HIV weakening the immune system and promoting the progression on recent and latent TB infection to active TB disease (Denegetu 2012:26). People living with HIV are almost 30 times more likely than HIV-uninfected people to develop TB, and the chronic immune stimulation resulting from active TB accelerates HIV/AIDS disease progression (Trinh, Nguyen, Nguyen, Sintchenko & Marais 2015:172). Human immunodeficiency virus infection and infection with TB bacteria are two completely different infections. If you have HIV infection you will not get infected with the TB bacteria unless one has been in contact with someone who is also infected with the TB bacteria. Although one lives in a country with a high prevalence of TB, this may have occurred without one realising it (Kanabus 2017:1). If one has TB, one will not get infected with HIV unless one carries out an activity with someone who already has HIV infection, which results in one getting the HIV virus from the infected person. Tuberculosis also occurs earlier in the course of HIV infection as an opportunistic infection, including those who are taking ART. There was an estimated 1.2 million HIV positive new TB cases globally in 2014. About 74% of these people live in SSA (WHO 2015:2). The Department of Health denoted that the risk of death in co-infected individuals is also twice higher than that of infected HIV individuals with TB, even when the CD4 cell count and ART are taken into account (South Africa 2014:10).

Globally, 30% of HIV infected persons are estimated to have concomitant infection with *Mycobacterium tuberculosis*. This percentage varies from 14% in Europe to 46% in Southeast Asia. The HIV epidemic increased the number of TB cases in countries with a high prevalence of HIV infection starting in the late 1980s, with a 3-fold increase in the number of TB case notifications over the decade, particularly in SSA (Getahun, Gunneberg, Granich & Nunn 2010: 202).

While TB and HIV co-infection remains a major public health problem in many parts of the world, the number is still lower in Albania (Gjergji, Bushati, Harxhi, Hafizi & Pipero 2017:4). South Africa ranked third in the number of incident TB cases in 2010 with an

estimated 61% of patients infected with HIV. Despite the important effort to curb the TB epidemic, SA was the only high-burden country where TB burden continued to rise in 2010 (Page-Shipp, De Lima, Clouse, De Vos, Evarts, Bassett, Sanne & Van Rie 2012: 2).

In Limpopo Province, HIV/TB co-infection has been a challenge, but great achievements have been made with regard to case findings and management. The number of TB patients with “known” HIV status has improved from 22.3% in 2008 to 92.2% in 2013. The HIV/TB co-infected patients on treatment have increased from 67.1% to 85.6% in 2013 (Limpopo Provincial Government 2016/2017: 22). In spite of this achievement, nurse managers in their role of coordinating the TB/HIV activities still experience challenges of patient's high loss to follow up, high TB death rate, low viral load completion and suppression.

2.4.2 Rationale for integrating TB/HIV activities

The WHO has recommended that countries or districts within countries that have a general adult HIV prevalence of more than 1%, coordinate TB/HIV initiatives at the national level, and outlined activities for patient-centred integration at the point of care (WHO 2004:2; WHO 2012:8). Integration of TB/HIV services is logical because of the epidemiological link between TB and HIV. There is also increasing evidence on the benefits of effective integration (International HIV/AIDS Alliance 2013: 22; WHO 2012:8). The coordination and integration of TB/HIV services may streamline health care systems, optimise the use of available resources and improve individual case management (Harris, Hatwiinda, Randels, Kanchea, Jham, Tambatamba, Cantrell, Levy, Kimerling & Reid 2008: 774). In addition, several studies have reported that this reduced referral delays and increased access to HIV care, while reducing the duplication of services (Pfeiffer et al 2010:7).

2.4.3 Opportunities for integration

Several opportunities for TB/HIV integration exist at both the program and service delivery levels (International HIV/AIDS Alliance 2013:15; WHO 2012:14). Since 2004, the WHO has provided clear guidelines and recommendations on interventions needed to prevent, diagnose, and treat TB in patients living with HIV. Nurse managers as coordinators of this program are the beneficiaries of the guidelines. However, the

main beneficiaries of collaborative TB/HIV activities communities that are affected by HIV and/or experiencing a high or rising burden of TB as a result of HIV (WHO 2012:10). The WHO identified twelve collaborative activities that address the interface of the TB and HIV epidemics that should be carried out as part of the health sector response to HIV/AIDS (WHO 2004:4; WHO 2012:14).

2.4.4 Collaborative TB/HIV activities

Nurse managers have a responsibility to ensure that these collaborative activities are implemented effectively and efficiently for better health outcomes particularly for TB/HIV co-infected patients. These activities are the bigger part of the content for the training of managers both at operational and management level. They are summarised in table 2.1:

Table 2.1: Collaborative TB/HIV activities

Establish and strengthen the mechanisms for delivering integrated TB and HIV services	
1. Set up a coordinating body for TB/HIV activities at all levels 2. Conduct surveillance of HIV prevalence among TB patients 3. Carry out joint TB/HIV planning 4. Conduct, monitoring and evaluation	Jointly by National AIDS control programme, National TB control program and partners
Activities to reduce the burden of TB in PLHIV :the “Three Is”	
5. Establish intensified TB case-finding 6. Introduce Isoniazid prevention therapy 7. Ensure TB Infection control	HIV control program
Activities to reduce the burden of HIV in patients with presumptive and diagnosed TB	
8. Provide HIV testing and counselling Activities to decrease 9. Introduce HIV prevention methods 10. Introduce Co-trimoxazole preventive therapy 11. Ensure HIV care and support 12. Introduce antiretroviral therapy	TB control program

(Adapted from WHO 2012:9)

By the end of 2010 more than 170 countries had reported implementing the components of the WHO's interim policy on collaborative TB/HIV activities developed

in 2004. Progress in scaling up the interventions to address the TB/HIV co-epidemic had continued since then (WHO 2011:13; WHO 2012:10).

The collaborative TB/HIV activities that are exhibited in Table 2.1 are described in detail in the ensuing sections.

2.4.4.1 Establish and strengthen the mechanisms for delivering integrated TB and HIV service

The WHO (2012:14) established activities for the mechanisms for collaborative TB/HIV identified as 1-4 is as follows:

1. *Set up a coordinating body for TB/HIV activities effective at all levels:* Coordinating bodies with equal representation from both TB and HIV sectors are needed at regional, district and local levels of the country to ensure effective collaboration between HIV and TB efforts.
2. *Conduct surveillance of HIV prevalence among TB patients:* Surveillance is essential to inform training on programme planning and implementation. The method chosen for the surveillance depends on the underlying HIV epidemic state of the country.
3. *Carry out joint TB/HIV planning:* TB and HIV programmes must devise joint national TB/HIV plans or introduce TB/HIV components to existing TB and HIV control plans. There should be clearly defined roles and responsibilities of nurse managers in guiding activities and in mobilising and managing the human and material resources.
4. *Conduct monitoring and evaluation (M&E):* M&E assesses effectiveness, efficiency, quality, coverage and delivery of collaborative activities. A core standardised set of indicators and data collection tools to be used in both TB and HIV programmes.

However, joint planning, coordination and monitoring have been major challenges for nurse managers due to the fact that programmes were still implemented vertically with performance based funding only on HIV-specific indicators and targets (Kapata, Chanda-Kapata, Grobusch, O'Grady, Schwank, Bates, Janssen, Mwinga, Cobelens, Mwaba & Zumla 2012:763).

For successful implementation of TB/HIV collaborative activities medium and long term strategic planning is imperative. Scaling up of collaborative TB and HIV activities should be integrated nationwide with consideration to prevention of TB transmission. The roles and responsibilities of nurse managers at each programme in implementing specific TB/IV activities at all levels must be clearly defined. Joint planning should be harmonised with the country's national health strategic plans and health-system strengthening agenda. Key areas to be covered include quality-assured health services; a well performing health workforce of nurses as first line contact with the patients, well-functioning information systems and equitable access to essential medicinal and treatment (WHO 2012:17).

Nurse managers play an imported role to conduct periodic sentinel surveillance on Ante Natal prevalence of HIV due to the burden of the HIV and TB pandemics. Surveillance is needed to inform programme planning and implementation (WHO 2006:1). Sentinel surveillance systems are usually based on unlinked anonymous testing methods, often using blood samples that have been collected for other purposes and stripped of all identifying markers (WHO 2009:15). However, routine *HIV testing data* can form the basis of a reliable surveillance system in all stages of the HIV epidemic, provided that high coverage is achieved. This routine data can be calibrated by periodic or sentinel surveys (WHO 2009:9). The Department of Health indicate that the HIV prevalence in SA is done routinely to pregnant women and generalised to the entire population (South Africa 2013:12).

2.4.4.2 Activities to reduce the burden of TB in PLHIV

The WHO (2012:22-25) proposed the following activities identified from 5-7 on table 2.1

5. *Establish Intensified TB case-finding*: Screening for symptoms and signs of TB in places where HIV-infected people are concentrated, followed by nursing diagnosis and prompt treatment which increases chances of survival, improves quality of life and reduces transmission of the disease.

6. *Introduce Isoniazid prevention therapy (IPT)*: Isoniazid is a drug given to people with latent TB infection to prevent progression to active disease. HIV programmes

should provide IPT for people living with HIV, provided the patient does not have active TB. IPT can be used with ART drugs.

7. Ensure TB Infection control in health care and congregate settings: TB transmission occurs where people with TB and HIV are crowded together, such as in hospital wards, prisons or military barracks. Such facilities must have TB infection control plans (supported by all stakeholders) that include administrative, environmental and personal protection measures to reduce transmission.

The published guidelines by WHO (2012:12) indicate that from 16 (70%) of countries are accounting for 67% of the global HIV-TB burden, hence the recommendation of using IPT for TB prevention among PLHIV. The seven (30%) countries that do not explicitly recommend IPT are China, Cote D'Ivoire, DRC, India, Indonesia, Myanmar and Zimbabwe. Among the countries that reported data, approximately 476 000 persons newly registered in HIV care in 2012 initiated IPT. Provision of IPT has increased steadily, particularly in SA, Namibia, Malawi and Mozambique. However, despite this progress and existence of published guidelines, the level of programme implementation of IPT was limited in at least eight of the 26 countries recommending the use of IPT (Gupta, Granich, Date, Lepere, Hersh, Gouws & Samb 2014:1153).

Early identification of TB followed by prompt initiation of treatment in PLHIV improves quality life and reduces transmission of TB at the clinics and the community at large. Prompt diagnosis and treatment of among HIV-negative people is also crucial to reduce TB transmission to PLHIV. All PLHIV should be regularly screened for TB using clinical symptom-based algorithm consisting of current cough, fever, weight loss or night sweats at the time of initial presentation for HIV and at every visit to a health facility (WHO 2012:22).

It is acknowledged that ART is a powerful strategy to reduce TB incidence among PLHIV (National Department of Health 2010:4; WHO 2012:24).

2.4.4.3 Activities to reduce the burden of HIV in patients with presumptive and diagnosed TB

The WHO (2012: 22-25) proposed the following activities identified from 8-12 on table 2.1

8. *Provide HIV testing and counselling:* The vast majority of HIV-infected people do not know their HIV status and seek health care from general service providers. HIV testing and counselling for TB suspects and patients offer an entry point for a continuum of prevention, care and support.

9. *Introduce HIV prevention methods:* Recommendations include promotion of safer and more responsible sexual behaviour, measures to ensure the safety of the blood supply and medical equipment and provision of ART to pregnant women living with HIV for TB suspects and patients.

10. *Introduce Co-trimoxazole (CPT):* CPT is a low-cost, available therapy which prevents several secondary bacterial and parasitic infections. TB and HIV programmes should establish systems to provide CPT to eligible people living with HIV who have active TB.

11. *Ensure HIV care and support:* TB and HIV programmes should ensure a continuum of care and support for people living with HIV, during and after TB treatment.

12. *Introduce ART:* ART improves the quality of life and greatly improves survival for people living with HIV. TB and HIV programmes should create mechanisms to provide ART to eligible TB patients, and ensure continuity of ART after completion of TB treatment (WHO 2012: 26-29).

To reduce the burden of HIV in patients with presumptive and diagnosed TB routine, HIV testing should be offered to all patients. It is imperative that HIV testing should be readily available and be offered voluntarily. By virtue of the sensitivity of the nature of the diseases informed consent should be obtained and confidentiality be ensured. All people diagnosed with HIV infection should be offered HIV prevention, diagnosis, treatment and care services, including ART. These services should be offered by TB-

control programmes or through effective referral to appropriate HIV services (WHO 2012:26).

There has been a great achievement in the implementation of the TB/HIV collaborative activities globally. According to the WHO TB global report (2016:3) between 2000 and 2014, joint TB/HIV activities saved an estimated 8.4 million lives. However, much more needs to be done to ensure universal access to these services and eliminate HIV-related TB death rate. The report further indicates that TB patients who were known to be living with HIV in 2014, 77% were initiated on ART and 87% on CPT. Between 2013 and 2014, the number of people screened for active TB increased from 5.5 million to 7 million in 2014. Among the 49 countries that reported data in 2014, 930 00 PLHIV received IPT (WHO 2015: 2).

2.4.5 Guidelines for nurse managers to implement the collaborative TB/HIV activities

It is noted that HIV pandemic present a significant challenge to global TB control. Tuberculosis is a leading preventable cause of death among PLHIV. The Stop TB Department and Department of HIV/AIDS of the WHO developed an Interim policy on collaborative TB/HIV activities in 2004 to mitigate the dual burden on TB/HIV in populations at risk of or affected by both diseases. The TB/HIV collaborative Interim policy was adapted to WHO policy on TB/HIV collaborative after scientific evidence was generated in 2012. The purpose of the policy is to provide national programmes and stakeholders with guidelines on how to implement and scale up collaborative TB/HIV activities (WHO 2012:10).

The goal of collaborative TB/HIV activities is to decrease the burden of TB and HIV in people at risk of or affected by both diseases. The objectives underlying this goal as outlined by the WHO (2012:14) are to:

- establish and strengthen the mechanism of collaboration and joint management between HIV programmes and TB –control programmes for delivering integrated TB and HIV services preferably at the same time and location

- reduce the burden of TB in PLHIV, their families and communities by ensuring the delivery of the Three I's for HIV/TB and the early initiation of ART in line with the WHO guidelines
- reduce the burden of HIV in patients with presumptive and diagnosed TB, their families and communities by providing HIV prevention, diagnosis and treatment

These objectives can be achieved only through the effective implementation of directly observed treatment (DOT), enhanced HIV prevention and care, and the delivery of additional collaborative TB/HIV activities. The additional collaborative activities address the interface of the intersecting TB and HIV epidemics and should be carried out as part of the health sector response to the dual TB/HIV epidemic. The recommended activities can be implemented by TB and HIV programmes, non-governmental organization (NGO's), community-based organization (CBO's) or private sector (WHO 2009:4).

2.4.6 Models of integration of TB and HIV service delivery

Guidelines for national programmes and other stakeholders identified five models for delivering integrated TB/HIV services (Legido-Quigley et al 2013: 5-8; WHO 2012:18-19).

2.4.6.1 *The five TB/HIV models*

These TB/HIV models are entry via TB service and referral for HIV testing and care, entry via TB service and referral for HIV care after HIV testing, entry via HIV service and referral for screening, diagnosis and treatment for TB, entry via HIV service and referral for TB diagnosis and treatment after TB screening and TB and HIV services provided at a single facility (at the same time and location) (WHO 2012:18).

These models of integration of TB/HIV activities are presented on figure 2.1

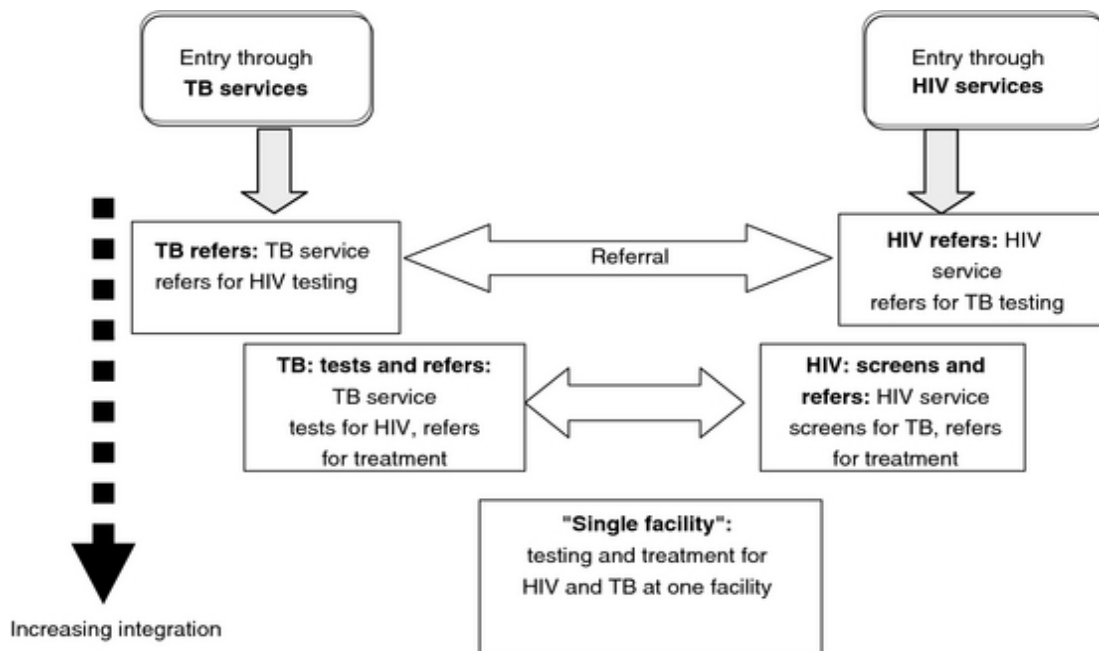


Figure 2.1: Models of integration of TB and HIV services (adapted from Legido-Quigley et al 2012:202).

The evolution and geographical distribution of the integrated care models is briefly discussed (Legido-Quigley et al 2012:202).

Entry via TB service and referral for HIV testing and care

In this model, TB services refer patients to services providing HIV testing, with or without subsequent HIV care. The model relies on strengthening referral linkages between TB and HIV.

Entry via TB service and referral for HIV care after HIV testing

In this model, TB clinics offer HIV testing on-site and refer people found to be HIV positive for HIV care. Depending on the HIV testing policy of the country this model may require additional HIV testing counselling space and also additional staff members depending on the burden in the clinic.

Entry via HIV service and referral for screening, diagnosis and treatment for TB

In this model, PLHIV are screened for TB and referred for TB diagnosis and treatment. Appropriate referral criteria and system are essential to the effective functioning of this model. Failure of the referral process can lead to on-going TB transmission and progression of TB disease.

Entry via HIV service and referral for TB diagnosis and treatment after TB screening

In this model, PLHIV are screened for TB diagnosis and treatment based on the outcome of the screening. The infrastructure needed for this model varies considerably, depending on whether additional interventions such as IPT are offered in HIV clinics or sputum sample collection on site that requires heightened infection control measures.

TB and HIV services provided at a single facility (at the same time and location).

This model includes a spectrum of activities to provide patient centred care by the same trained health care provider at the same visit, a “one stop service”.

The WHO (2012:18) acknowledges that the models identified and described in the policy guidelines are neither exhaustive nor prescriptive. Hence, there are three models identified from the manual of the best practices in the integration of TB/ HIV and AIDS services compiled by Wandwalo, Moodie and Suarez (2010: 2-8).

2.4.6.2 Three models of TB and HIV integration

These three models of TB and HIV integration are illustrated on figure 2.2

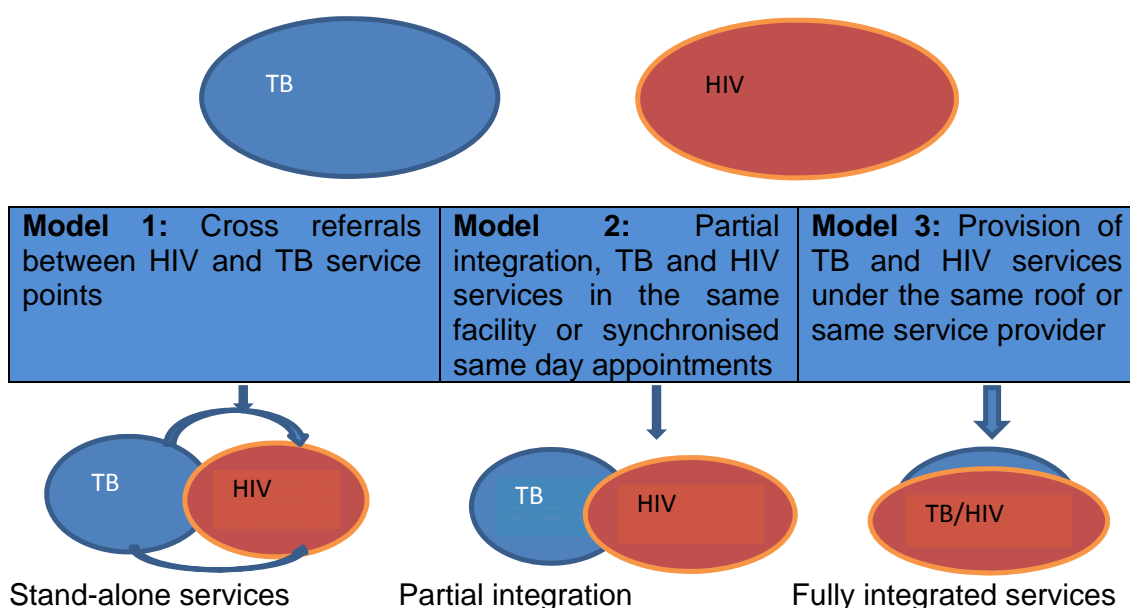


Figure 2.2: Three models of TB and HIV/AIDS services integration (adapted from Wandwalo et al 2010:3).

Model 1: Stand-alone services

In this model, TB and HIV/AIDS services are provided at different service delivery points and linked through a referral system. This model is implemented in lower-level health facilities, especially in some health centres and primary health care facilities in Benin, Kenya, Malawi, and Rwanda, as well as in low TB and HIV prevalence countries such as Cambodia (Friedland et al 2007: 115- 117).

Model 2: Partially integrated services

With this model, both TB and HIV/AIDS service delivery points are located in the same health facility. Some HIV/AIDS services such as HIV testing and counselling are provided in the TB clinic and some TB services such as screening and diagnosis of TB among PLHIV are provided in the HIV/AIDS clinics. Patients visit two different clinics (TB and HIV/AIDS), which are served by different staff who are specialising on TB or HIV/AIDS respectively. In this way, patients can get from the second clinic whatever services are missing in the first one. The model is implemented most often in higher-level health facilities such as hospitals, and in some health centres. This is the most common model in Benin, Cambodia, Kenya and Malawi (Wandwalo et al 2010: 4).

Model 3: Fully integrated services

The third model is for provision of fully integrated TB/HIV services. This model ensures that the same healthcare workers deliver all services to the patients in the same room (Wandwalo et al 2010: 8; USAID 2014:1).

The implementation of the five and three model framework facilitates comparison of the advantages and disadvantages of the different integration model in different context. The models where care is integrated within one facility are likely to require additional resources, because few services have been designed with integration in mind (Legido- Quigley et al 2013: 207).

2.4.7 Challenges faced by nurses when implementing the TB/HIV activities

The experiences of nurses in the implementation of TB/HIV activities are reported in literature in varied ways. In a study conducted by Njosing et al (2011:9) their findings report that many of the participants become counsellors on humanitarian basis for the purpose of assisting patients. And yet others were not selected because of their interest in the profession but to cover shortage of counsellors in the unit. This kind of experience resulted in personnel not to be dedicated to their service and as a result render poor services. The participants commended the training received despite the immense amount of material covered within a short period of time. Some of them raised a concern that the quality and duration of training they received was variable, and coupled with the fact that in-service training and supervision were infrequent.

In a study conducted by Atkins et al (2011:6) revealed that despite nurses having undergone training, not all of them felt prepared to implement the knowledge and resulted in strained working relationship that affected negatively the day-to-day operation of the program. Lack of supervision by managers after being trained, poor dissemination and implementation of guidelines was also raised as a concern that led the staff to provide services without enough knowledge (Maimela et al 2015: 7).

In almost all the studies conducted to understand the experiences of nurses and counsellors in relation to the implementation of TB/HIV collaborative activities, most of them expressed a concern of lack of staff and high workload. Nurses expressed in one qualitative interview that “HIV has turned primary health care its head” (Chehab et al 2013:4 & Pope et al 2011:6) and that this has burdened the TB treatment program, as a result of high prevalence of TB/HIV co-infected patients. The participants expressed that the challenges of staff shortage were compounded by TB nurses being asked to assist in other wards and there was no reciprocity in the arrangement. Nurses also expressed that there is too much administrative work while implementing TB/HIV collaborative activities (Chehab et al 2013:4 & Pope et al 2011:6).

Structural issues related to insufficient space was also revealed as a challenge that lead TB and HIV units to be operated in separate buildings (Njosing et al 2011:10). This could result in poor internal referral system and tracking of patients. The participants also expressed a feeling of fear of contracting nosocomial TB infection to

HIV –positive patients who are at risk due to poor ventilation in waiting areas. In the same study, participants expressed fear of being at high risk of contracting infections particularly when patients are co-infected (Njosing et al 2011:10). Privacy and confidentiality concerns and delay in service provision were expressed as a result of inadequate work space. It is noted that there is considerable secrecy and stigmatisation attached to TB/HIV pandemics.

Despite the challenges perceived or experienced by facility nurse managers, there were positive aspects shared by participants about services that promote rendering of comprehensive care and team work at all levels (Njosing et al 2011:9). This was evident in nurses from both units assisted each other although they had specific duties to perform in their respective areas. It was enhanced by integrated training that were conducted formally or informally to both TB and HIV personnel (Carlsson et al 2014:7). However, majority of participants reported that availability of policies enabled them to initiate HIV Testing and Counselling (HCT) and explain the rationale for testing in TB settings. Participants also felt that policies would help them overcome HIV stigma as it gave them an easier route into discussion of HIV avoiding moral judgments (Davyduke, Pietersen, Lowrance, Amwaama & Teagtmeyer 2015:992). Some of the participants demonstrated remarkable innovation by adapting integration models to overcome staffing and space constraints while minimising disruption to existing services.

2.5 CONCLUSION

In this chapter, the purpose of the literature review was outlined. Scope of the research review was discussed under a number of themes that emerged. from the literature. These themes covered aspects such as TB/HIV co-infection, rationale for integrating TB/HIV, opportunities for integration, the collaborative activities and models of integrating TB/HIV activities. Some of the challenges which were both negative and positive as experienced by nurse managers were highlighted.

In chapter 3, the research design and method of the study was described

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

The research methodology of this study comprised of the research design and the different research methods and techniques that were used to investigate the research problem for empirical evidence. A guide, a recipe or a map is needed in order to reach a destination. The research design and method in this study were the guide or recipe which was used to draw conclusions about the study phenomenon. The implementation of a good research study requires a clear research question, a fitting method to answer the query and the availability of people with rich information to answer the question or grand tour question in qualitative studies (Streubert & Carpenter 2011:33). The study was conducted at five sub-districts of Mopani. The research design of this study was a qualitative, non- experimental, explorative and descriptive design that was based on the phenomenological philosophy. The grand tour question asked was “What are your experiences as a nurse manager in relation to the implementation of the collaborative TB/HIV activities at management level?” The research techniques and procedures used were population, sampling and sampling techniques, sampling size, data collection and analysis. Trustworthiness measures and ethical considerations were ensured (Polit & Beck 2012:741).

This chapter was at the second stage of the research process and involved constructing the research methodology, which focused on a qualitative non-experimental, explorative research design, theoretical framework and the research methods. In this stage, the researcher gained the privilege of entering the sub-districts by permission and developed a rapport with the nurse managers as gate keepers (Polit & Beck 2012:67). The process of stage two overlapped to stage three due the concurrent collection of data and analysis.

3.2 RESEARCH SETTING

According to Brink et al (2013:59), setting refers to the field where the research will be undertaken. The identified setting in this study depended on the nature of the research question, objectives and the information required to address the research problem.

The study took place in Mopani District in Limpopo province of SA which is a rural area that has as population of 1 138 064, mostly women and children (Table 3.1). There are five sub-districts with 105 clinics, 8 Community Health centres (CHC) and 6 district hospitals (Figure 3.1; Table 3.2). The context has a huge staff establishment of all nurse categories but the focus on this study was on nurse managers who were 88 operational and 25 nurse managers as exhibited on Table 3.3. Each sub-district has an annual turnover of an average 1233 TB/HIV co-infected (table 3.4) who were on treatment, 452 who were missed and were not given treatment as per the statistics in 2015/2016 (Limpopo Provincial Government Health Plan: 2015/16:20).

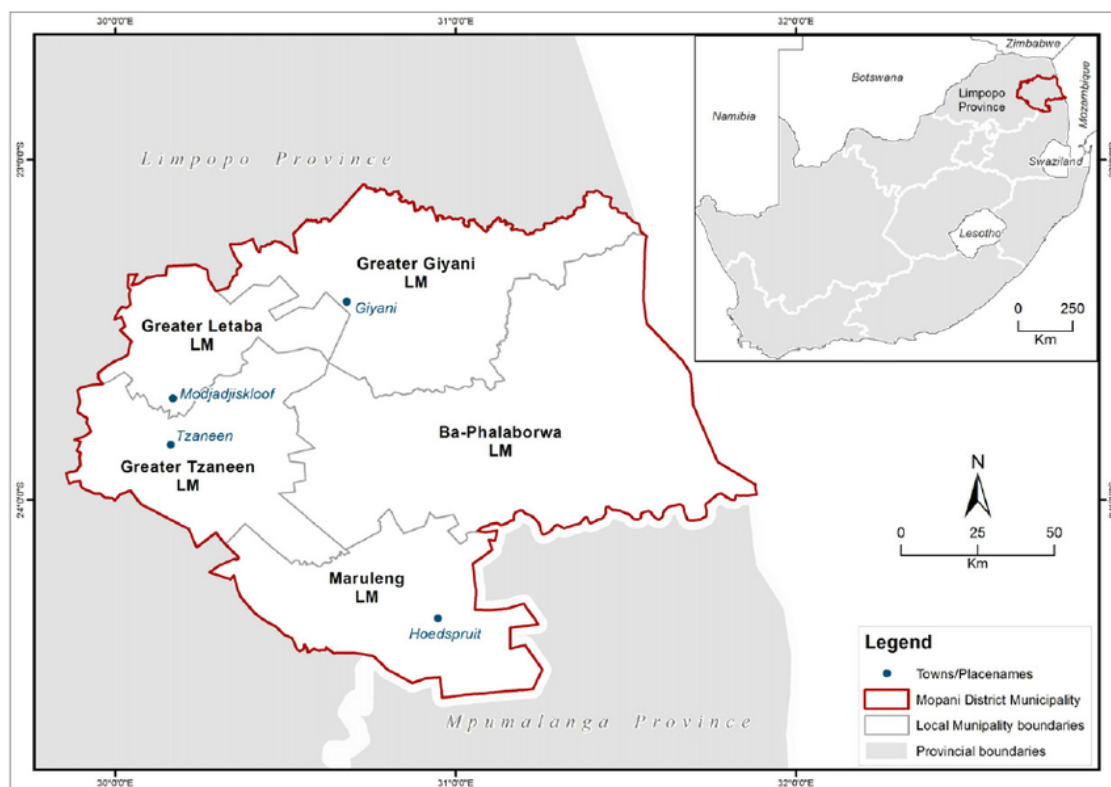


Figure 3.1: Mopani sub-districts map (Baiyegunhi & Oppong 2015:36)

Mopani district carries the highest number of patients on ART and 95% TB/HIV co-infected patients on ART see (Table 3.3) (Mopani District: Health Plan 2015/2016:12-44). Mopani district office is responsible to implement the district health system, by planning, coordinating and monitoring the comprehensive PHC services that are rendered at the facilities in all five sub-district level. The comprehensive PHC package includes TB/HIV activities that are understudy. At the district office there are 25 program managers that vertically manage different programs like, PHC services, TB-

Control, HIV/AIDS, STIs services, Mother Child & Women's Health & Nutrition (MCWH&N) and Public Health programs oversee the implementation of the PHC package. The district has District Special Clinical Team that provides clinical technical support to the clinicians. The five sub-districts are managed by PHC managers and there are program coordinators that report to the district program managers. Each facility is managed by the Operational Managers, who is supervising four Professional nurses, two Enrolled Nurses and one Enrolled Nurse Assistant per facility.

Table 3.1 Mopani district Population

Sub district	District total population	% of district population
Sub-district 1	98 737	8.67%
Sub-district 2	250 470	22%
Sub-district 3	219 058	19.24%
Sub-district 4	409 960	36%
Sub-district 5	159 839	14.08%
Total	1 138 064	100%

Total Population - District Health Information System pivot table
(DHER 2015/16: 12).

Table 3.1 presents the Mopani district population distributed per sub-district. Sub-district 4 carries the highest population, followed by sub-district 2. The population is mostly unemployed, uninsured, poverty stricken and contribute to overcrowding the health system and workload for nurses.

Table 3:2 Primary Health Care facilities

Sub district	District hospitals	Clinics	Community Health Centres	Total Facilities
Sub-district 1	1	10	1	11
Sub-district 2	1	26	2	28
Sub-district 3	1	19	1	21
Sub-district 4	2	25	4	34
Sub-district 5	1	11	0	11
Total	6	91	8	105

Mopani District Health Plan: 2015/16: 22

Table 3.2 presents Mopani sub- districts facilities which are 6 district hospitals, 91 clinic and 8 CHC's. These health care facilities provide comprehensive PHC services with the main focus on TB/HIV services.

Table 3.3 Nurse managers

MOPANI DISTRICT	OMs	MMs
Sub-district 1	10	
Sub-district 2	28	
Sub-district 3	21	
Sub-district 4	35	
Sub-district 5	11	
District	88	25
Total	113	

Mopani District Health Plan (2015/2016:36)

Table 3.3 highlighted the operation and managerial managers responsible for the implementation and coordination of the TB/HIV activities. Sub-district number 4 has the highest number of OMs are distributed according to the facilities and the high turnover of patients.

Table 3:4 Indicators for district health workload

Sub district	PHC headcount	PHC utilization rate	ART client remain on ART	TB/HIV co-infected client on ART rate
Sub-district 1	479 520	2.3	9455	79.2% 209/264
Sub-district 2	751 407	3.0	13773	98.6% 409/415
Sub-district 3	657177	2.7	13478	95.8% 368/384
Sub-district 4	1 229868	2.9	26 913	99% 967/977
Sub-district 5	296214	3.1	6542	97.7% 214/219
Total	3 414186	2.8	70161	95.9% 2167/2259

Mopani District Health Plan: (2015/16: 44).

Table 3.4 presents the total headcount of patients that are accessed health facilities for care by 2015/2016. They are patient that were HIV positive clients remaining on ART and TB/HIV co-infected clients on ART. Sub-district five followed by sub-district two had the highest % of population that utilised the services which had implications on the role of nurse managers as coordinators and implementers of the TB/HIV program.

3.3 RESEARCH METHODOLOGY

The research methodology of this study comprised of the research design and the different research methods and techniques that were used to empirically study the research problem.

3.3.1 Research design

A research design refers to the overall strategy chosen to integrate the different components of a study in a coherent and logical way, thereby, ensuring that the research problem is addressed effectively (Polit & Beck 2012:66). The research design of this study was a qualitative, non-experimental, explorative and descriptive design based on the element of the phenomenological philosophy. The research design was the overall plan that the researcher employed to generate and analyse data (Creswell 2013:49).

The researcher chose the qualitative research paradigm approach to answer the question of this study, because it involved real-life experiences of participants who were engaged in a meaningful conversation with the researcher to provide qualitative information on the study phenomena.

3.3.1.1 Qualitative Paradigm

A paradigm is defined as a way of looking at natural phenomena, a worldview that encompasses a set of philosophical assumptions and that guides one's approach of inquiry (Polit & Beck 2017:738). It is an overall philosophical framework that was applied in this study to assist the researcher to produce credible findings (Holloway & Wheeler 2010:341). The qualitative research paradigm was used to allow participants to freely express themselves as to what their experiences were concerning the study phenomena and the meaning attached to them (Brink et al 2013:120). Qualitative research allowed the subjective views of the participants to be expressed, captured on the digital audio recorder and reflected on by the inquirer. The approach was used as a form of social inquiry that focused on the way people make sense of their experiences and the world in which they live (Holloway & Wheeler 2010:3).

Qualitative research focused on the emic perspective of the participants, which was enhanced by the use of the local language, common concepts or means of expression to characterise and describe their experiences meaningfully (Polit & Beck 2017:468).

There were a number of advantages that the researcher experienced when using qualitative research.

Advantages of qualitative paradigm

- The method was useful for exploring the full nature of a little understood phenomenon as the one undertaken (Polit & Beck 2012:14).
- Enabled the researcher to search for explanations about how or why the phenomenon exists or what a phenomenon means as a basis for developing a theory that is grounded in rich, in-depth, experiential and empirical evidence. This mode of enquiry aimed at examining the nuances and complexities of the phenomenon that was studied (Polit & Beck 2012:14).
- The selected participants and the kind of data that was generated become focused and purposeful as the conceptualisation was developed and refined (Polit & Beck 2012:15). The focus of qualitative research is usually broad and the intent is to give meaning to the whole as the qualitative researcher has an active part in the study (Burns et al 2013:23).
- The participants who participated in the study were knowledgeable informants on the subject of the implementation of the collaborative TB/HIV activities.

The design was suitable for gaining insight into the experiences of nurse manager for implementing the program and what reality they attach to their world. However, there were some disadvantages experienced in the used of the qualitative paradigm.

Disadvantages

The disadvantages of the qualitative approach in this study pertained to the huge volume of information that was uncovered and which had to be analysed and be presented in a manner that reflected the reality of the experiences of both operational and middle nurse managers. Most researchers regard this approach as subjective and seem to violate the rule of objectivity. However, in this study bracketing was used to

hold in abeyance any preconceived beliefs, opinions, views and the experience of the researcher especially as this is a phenomenological study (Polit & Beck 2017:471).

Bracketing

Bracketing in this study, required the researcher to be neutral with respect to beliefs or disbelief in the existence of the phenomena. It was however impossible to achieve total bracketing. The researcher tried to set aside previous knowledge or personal belief about the phenomenon under study to prevent the information from interfering with the recovery of a pure description of the phenomenon and the findings (Streubert & Carpenter 2011:77). Bracketing was fully detailed in section 3.5 on page 61.

Other research designs used were the explorative, descriptive based on phenomenology.

3.3.1.2 Exploratory Research Design

Exploratory research is defined as a study that explores the dimensions of a phenomenon or develops or that refines hypothesis about relationships between phenomenon (Polit & Beck 2012:727). Exploratory research looks at specific fields or topics that have been partly researched or has not been adequately addressed empirically. It considers the “what” of a matter and although it seldom gives the final conclusions, it does signify whether further research pertaining to a problematic issue or about specific topics is indicated (Polit & Beck 2012:18). Exploratory research in this study was conducted in order to satisfy the researcher's curiosity and desire for a better understanding and to explicate the central concepts and constructs of the study phenomena (Polit & Beck 2012:18). It was used to respond to the research theoretical statement of this study which was “What are the experiences of nurse managers relating to the implementation of collaborative TB/HIV activities at management level”? In this study, the experiences of nurse managers relating to the study phenomenon were explored using qualitative unstructured and individual in-depth interviews.

3.3.1.3 Descriptive Research Design

Descriptive research is aimed at providing specific details of a situation and frequently follows exploratory research in that describing a situation, the researcher has to be clear about what the main aspects are, the ‘how’ and ‘who’ is involved in a situation is being clarified (Schmidt & Brown 2012:176). The purpose of this descriptive design was used to obtain complete and accurate information about the phenomenon. The descriptive research assisted the researcher to provide a thick and detailed description of the experiences of the participants for the purpose of audit trail.

3.3.1.4 Phenomenological research philosophy

Phenomenology is defined classically by Streubert and Carpenter (2011:74) as a system of interpretation that helps individuals to perceive and conceive themselves. Holloway and Wheeler (2010:213) concurs with this definition by defining phenomenology as a philosophy which explores the meaning of individuals’ experiences through their own reported experiences. The concept is further explained as a way of viewing ourselves, others and everything else whom or with which we come into contact in life (Holloway & Wheeler 2010:213).

The phenomenological tradition was used in this study to understand the meaning that nurse managers attached to their experiences while implementing the collaborative TB/HIV activities (Brink et al 2013:121). Phenomenological design was the desired philosophy because it assistant the researcher to examine the experiences of nurse managers who answered the question “What are your experience as a nurse manager related to the implementation of the collaborative TB/HIV activities? (Brink et al 2013:121; Polit & Beck 2012:490).

Phenomenology emphasises that people’s actions should be explained with reference to their conscious intentions. Intentionality means that consciousness is always consciousness of something (Streubert & Carpenter 2011:74). The researcher maintained that phenomenological research is suitable to capture the essence of how nurse managers experienced the implementation of the TB/HIV collaborative activities and how their experiences influenced their management processes. Use of this tradition involved application of the descriptive and interpretive phenomenological research with the elements of intuiting, analysing and describing.

Types of phenomenological research

Although the phenomenological philosophy is broad and focuses on the lived experiences of people, in this chapter the elements of descriptive and interpretive phenomenology was applied to guide data collection and analysis.

Descriptive phenomenology

The researcher employed both the descriptive and interpretive phenomenological research to describe and interpret nurse managers' experiences on the study phenomenon. Suggestions for guiding phenomenological interview to produce rich descriptions of the experience were followed based on the prepositions of Polit & Beck (2012:536) who suggest that:

- experiences are described from the emic or inside position of the interviewee, as it were: almost like a state of mind; the feelings, the mood and the emotions,
- focus is on a particular example or incident of the object of experience, specific events, an adventure, a happening or a particular experience.
- try to focus on an example of the experience which stands out for its vividness, or as it was the first time.

The researcher implemented basic phenomenological actions that included intuiting, *describing* and *analysis* during the descriptive phenomenology enquiry process (Brink et al 2013:122; Polit & Beck 2017:471).

Intuiting

Intuiting illustrates eidetic comprehension or accurate interpretation of what is meant in the description of the phenomenon under investigation. In this study it occurred when the researcher tried to develop an awareness of the experience without forcing prior expectation or knowledge in the process (Brink et al 2013:122; Streubert & Carpenter 2011:76). Remaining open during interviewing assisted the researcher to better understand the experience of nurse managers relating to the implementation of the collaborative TB/HIV activities for the purpose of exploring it through probes and

its description (Polit & Beck 2017:472). Intuition required the researcher to become totally embedded in the phenomenon of interest (Brink et al 2013:122).

Analysing

Analysing in phenomenology research is defined as a process that involves identifying the essence of the phenomenon under investigation based on data obtained and how they are presented (Streubert & Carpenter 2011:80). Whereas, Polit and Beck (2017:530) outline that analysis of qualitative data is an active and interactive process. In this study, the researcher scrutinised the data carefully and deliberately, often read and reread data in search of meaning and understanding (Brink et al 2013:122). While Polit and Beck (2017: 531) note that qualitative data analysis is a “process of fitting data together, of making the invisible obvious, and of linking and attributing consequences to antecedents. The major data source in this study was qualitative interviews that were tape recorded. Then the collected data was transcribed verbatim to enable data analysis. Data analysis was done using the eight steps of Tesch’s inductive, descriptive, open coding technique of qualitative analysis (Creswell 2014:198-199).

Describing

Describing in phenomenological research is a process developed by Husserl (Polit & Beck 2017:471) who was interested in answering the question: what do we know as persons? His philosophy emphasised descriptions of human experiences. Descriptive phenomenologists insist on the careful description of ordinary conscious experience of everyday life and a description of “things” as people experience them. These “things” include hearing, seeing, believing, feeling, remembering, deciding, evaluating and acting (Polit & Beck 2017:471). The aim of the describing operation was to communicate and bring to written and verbal description distinct, critical elements of the phenomenon (Streubert & Carpenter 2011:82). The description was based on the classification or grouping of the phenomenon. However, Streubert and Carpenter (2011:82) alert researchers to avoid describing the phenomenon prematurely, as premature description is a common methodological error associated with descriptive research.

Interpretive phenomenology

Interpretive phenomenology or hermeneutics implies interpreting and understanding human experience. In this study, key principles of interpretive phenomenological analysis were applied by the researcher to investigate the phenomenon of experience of a person in the context of nurse managers. It required intense interpretation and engagement with the data obtained from the person and the data was examined in detail. In-depth individual unstructured interviews were conducted with participants during which phenomenology or hermeneutics as proposed by Merleau-Ponty brought the art and philosophy of interpreting the meaning of the participants' experiences (Polit & Beck 2012:496-497).

Phenomenology was employed as a research tradition that focused on experiences of individuals within their lifeworld and enabled the researcher to interpret the individual's experiences (Polit & Beck 2012:491). Interpretation of the text was also done through the process termed by Heidegger as fusion of horizons (Holloway & Wheeler 2010:228). Therefore, the data collection and analysis was also guided by Heidegger on how participants expressed themselves and attached meaning to their experiences. Participants elicited meaning, experiences or perception from their point of view, rather than the researcher's perspective.

Inductive reasoning underpinned the philosophical stance by applying inferences from the specifics to the general premises.

3.3.1.5 Inductive reasoning

Inductive reasoning is defined as a logical process in which multiple premises, all believed true or found true most of the time, are combined to obtain a specific conclusion (Polit & Beck 2012:12). Polit & Beck (2012: 10) indicate that inductive reasoning is the process of developing generalisations from specific observations to the general premise. Inductive reasoning in this study stemmed from a specific scientific premise to the general in which particular events were narrated and combined into a larger whole or general statement in relation to experiences of nurse managers implementing collaborative TB/HIV activities. Through inductive reasoning the researcher reduced themes until only two major themes, five categories and ten subcategories were established (Creswell 2014:198).

Research methods that were followed in this study included population, population sample and sampling technique, data collection and analysis, ensuring trustworthiness and ethical considerations.

3.3.2 Research methods

Research method refers to the logical process followed during the application of scientific methods and techniques when a particular phenomenon is empirically investigated (Polit & Beck 2012:765). According to Grove et al (2015:195), research method refers to the process or development of plans for actually carrying out the exact steps of the study. Research method in this study referred to techniques and processes that the researcher used to structure the study and how to gather and analyse information relevant to the research question in a systematic manner (Polit & Beck 2017:735). Research methods that were used were population, sample and sampling technique, data collection and analysis, ensuring trustworthiness and ethical considerations.

3.3.2.1 Population

A research population is defined as the entire aggregation of cases having some common characteristics in which a researcher has interest. Burns et al (2013:703) elaborate the explanation of population as all elements (individuals, objects, events, or substances) that meet the sample criteria for inclusion in a study. The different types of populations are universal, target and accessible.

These population types and sample are exhibited on figure 3.2

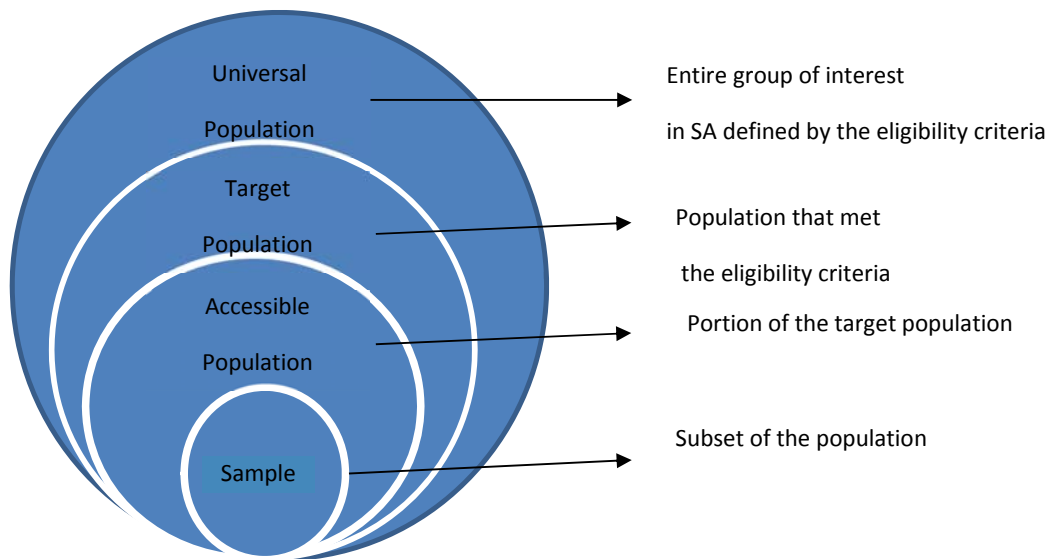


Figure 3.2 Population and Sample (Adapted from Burns et al 2013:352).

In this study universal population referred to all nurse managers in SA (Polit & Beck 2012:238). The target population referred to the entire population of nurse managers who met the inclusion criteria (Polit & Beck 2017:747). The accessible population comprised of 14 nurse managers that were available and willing to participate in the day of data collection through individual interviews (Polit & Beck 2012:744).

Inclusion and exclusion criteria

According to Polit and Beck (2012: 274), inclusion criterion is characteristics that a person must have in order to be allowed to participate in a study.

The participants who met the inclusion criteria were nurse managers who:

- were 30 years and above
- both males and females
- had two years of experience working as operational or middle management managers
- gave verbal and/or written consent to participate in the study

An exclusion criterion is defined by Polit and Beck (2012:274) as those characteristics that make a person to be excluded from taking part in a study.

Participants who were excluded from participation were nurse managers:

- whose experience of working as operational or middle management managers was less than 2 years
- who were below 30 years of age

3.3.2.2 Sample and sampling technique

A sample is a part or fraction of a whole (see figure 3.2), or subset of a large set, selected by the researcher to participate in a research study and about which data are collected (Polit & Beck 2017:250). According to Polit and Beck (2012:275), sampling is the process of selecting participants to represent an entire population so that description and inferences about the population can be made. In this study, the selection of the sample has been informed by the inclusion and exclusion criteria.

There are two types of sampling which are probability and non-probability sampling. Probability sampling technique is used to select research elements or participants randomly where each element in the population has an equal chance of being selected. This is mainly used for quantitative research, where statistics are used to present the results (Brink et al 2013:134; Polit & Beck 2010:275). Non-probability sampling is used by qualitative researchers to select research participant non-randomly. Examples of the sampling approaches under this technique include purposive or judgemental, quota, convenience, snowball or network and consecutive approaches. In non-random sampling elements are selected based on their contribution to data required (Brink et al 2013:139-140; Polit & Beck 2010:275).

This study was a non –experimental and used the non-probability sampling method.

Non –probability purposive sampling

Non –probability purposive sampling, also called judgemental sampling was chosen in this study to recruit participants. The judgmental sampling method enabled the researcher to make personal judgement on selecting rich informants that were able to articulate their experiences and benefit the study (Polit & Beck 2012:739). The participants were selected purposefully because of their knowledge and skills of implementing the collaborative TB/HIV activities.

Purposive sampling allowed the researcher to hand-pick the sample based on knowledge of the phenomenon of the study even though it had the potential for

sampling bias (Brink et al 2013:141). However, bias was dealt with by applying the bracketing process that assisted the researcher to identify the appropriate participants justly without coercion or use of own authority and status (Brink et al 2013:122).

3.3.2.3 Sample size

Since this study employed the phenomenological approach, no specific sample size was pre-determined. Sample selection continued until data saturation occurred at the 14th interviewee when themes and categories in the data became repetitive and redundant such that no new information was generated by further data collection (Polit & Beck 2017:254). According to Polit and Beck (2017:744), saturation is the collection of qualitative data to the point where a sense of closure is attained because new data yield redundant information. The goal of data saturation was to generate enough in-depth data that illuminated the patterns, categories, conceptual patterns and dimensions of the phenomenon under study (Polit & Beck 2017:497). However, Streubert & Carpenter (2011:30) warns that saturation may be a myth in the sense that, if another group of individuals were observed or interviewed at another time, new data may be revealed.

3.3.2.4 Data collection

Data refers to pieces of information that the researcher has drawn from participants during study (Brink et al 2013:211; Polit & Beck 2012:725). In this study, data collection referred to the gathering of data which addressed the research question and objectives. It was a process whereby the researcher collected information from the research participants face to face through in-depth unstructured individual interviews (Polit & Beck 2012:725). The theoretical statement that was asked was “What are your experiences as a nurse manager in relation to the implementation of collaborative TB/HIV activities?” An interview guide was used to collect data. A digital tape recorder was used to capture the interviews verbatim. The transcripts were typed by the researcher and subjected for qualitative analysis.

Data collection in this study aimed at understanding not only human actions and experiences, but also making explicit the underlying intentions and meanings from the data which is in words, gestures, symbols and artefacts (Monareng 2009:130).

3.3.2.5 Data collection approach

Data collection approach in this study included information on demographic data collection process and the in-depth unstructured individual interviews.

Data collection

In this study, a demographic data as part A, and an interview guide which comprised part B for in-depth individual unstructured interview was utilised. According to Monareng (2009:130), an interview is build-up of four kinds of questions, which are demographic, open ended, probing and follow-up questions. In this study, the interview guide (Annexure E) had two sections. Section A was demographic collection tool used to collect biographic data. Demographic questions were used as an ice breaker. They were presented as written responses in a questionnaire format. Section B had a grand tour question, commonly known as a broad question which was asked to explore the participants' experiences. The question was asked consistently to all the 14 participants. This was followed by probing questions for more clarity on the responses.

Demographic data

A demographic data (Annexure E) was used to collect data from participants who provided their profile in terms of gender, age, place of work, qualifications, and experience as nurse managers, courses related to HIV and TB and years of experience implementing.

The researcher as the key instrument

The researcher was the main instrument in this study and was subjectively involved in the research process. The researcher collected data by requesting participants to fill in the demographic form and conducted an unstructured in-depth interview through face to face using an interview guide (Annexure E) (Creswell 2014:10).

3.3.2.6 Data collection process

The data collection process entailed preparations of resources to be used and the venue. The following resources were given to the gate keepers and participants in the process to facilitate data collection.

- Ethical clearance from UNISA, the approval from department of Health, permission letter from Mopani district management where the study was carried out, participant information leaflet with study purpose and objectives, information about the study with consent and confidentiality forms for participants to sign, and a two-part interview guide, section A for filling in and Section B had the grand tour question.
- The forms were placed in a plastic folder with a pen. A can of soft drink and a packet of biscuits for snacking were offered for refreshments.

Preparation of the venue for interview

The interview dates and time were arranged with the participant before the actual date of the interview. Interviews were conducted on different dates and venues due to the diversity of the district. The first interview session was conducted to eight MMs, who were attending the district review meeting. The arrangement was convenient for the researcher to find key participants in one area. The participants were divided into two groups as the meeting was scheduled for two days. The interviews were scheduled from 14:00 to 20:00 over the two days. The interviews were conducted in a boardroom after permission was obtained. A notice for no disturbance was pasted at the door to ensure privacy and interruptions. The other six OM's were interviewed in their work places respectively on different dates and times.

The in-depth unstructured individual interviews

The unstructured interview, also referred as in-depth, open-ended, narrative or long face to face interview is the favoured method used by qualitative researchers (Saks & Allsop 2013:87). In this study, the unstructured interviews were conducted more like a normal conversation, but with a purpose to obtaining information to answer the grand tour question (Brink et al 2013:158).

Advantages of using unstructured interviews

According to several researchers (Brink et al 2013:158; Polit & Beck 2012:536; Saks & Allsop 2013:88), there are advantages to an in-depth, unstructured interview. The advantages as applied outlined as follows:

- The process of collecting data was cost effective, the data collected was of quality and collected in a relatively short time frame.
- An adequate sample was obtained through data saturation.
- The process was flexible, permitted the researcher to pursue emergent themes, follow the lead of the interviewee and gained new insights.
- It was easy to observe non-verbal communication and mannerisms that could be interpreted
- The researcher and participants were able to clarify questions through probing

However, there were some disadvantages encountered during the unstructured interview (Polit & Beck 2008:296):

- There was inconsistency in data collection with regard to time as participants responded differently
- More time was required from the interviewer as compared to self-administered questionnaires
- There was a huge volume of data obtained through the transcribes which made the transcribing, typing, analysis to be time consuming and laborious.

Interviewing

All 14 participants consented to be audio recorded. The tape recorder was put on the table at the convenient place for the researcher to operate. The arrangement of sitting allowed for eye contact. The participants were given an opportunity to fill in the demographic form prior the interviewing process. The researcher asked the individual participants the grand tour question. Probing questions were posed guided by the participants' responses for more clarity and explanations. The interview session ranged between 30 to 45 minutes. A digital tape recorder was used to capture the interviews verbatim for more comprehensive record keeping after permission to do so

was obtained from the participants. The transcripts were typed by the researcher and subjected for qualitative analysis.

Challenges encountered during conducting interviews

As a novice researcher, handling responses of participants who answered the research question incoherently was a challenge, especially to pick up key concepts related to study phenomenon. Also one of the challenges the researcher encountered while conducting the interview, was the background noise. The other challenge was the participant cell phone that rang frequently during the interview. However, both incidences did not disrupt the session but produced poor sound to audio-recorded data.

3.4 DATA MANAGEMENT & ANALYSIS

Data management refers to the way the data is managed as well as how it is kept safe after being collected. The documents of the participants were given codes to ensure anonymity and confidentiality and kept under lock and key in the researchers' office. It is noted that in qualitative studies data management is "reductionist" in nature which involves reducing masses or large amounts of data into smaller portions. In this study, data reduction was a form of analysis that helped the research to sharpen, sort, focus, discard and organises data in such a way that the final conclusions were drawn and verified (Namey & Guest 2015:139). Data analysis in qualitative studies is also "constructivist" in nature whose goal is to understand how individuals construct reality within their context (Polit & Beck 2012: 562).

In this study, data management and analysis occurred simultaneously. The audio-recorded interviews were transcribed verbatim immediately after data collection. They were labelled and captured on a CD and memory stick for Audit trail for 5 years (Grove et al 2015:531).

3.4.1 Data analysis process

The process of data analysis began during transcription of the audio-records during data collection. Data analysis was done using eight steps of Tesch's inductive, descriptive open coding technique of qualitative analysis (Creswell 2014:198; Grove et al 2013:89). The audio-recorded interviews were transcribed verbatim by the

researcher. The transcripts were then written in a tabular form for easy coding (Annexure F). The collected data was synthesised and organised systematically to account for the processes and Tesch's method that was used in data analysis (Polit & Beck 2012:125). The process of listening and transcribing data recorded gave the researcher an opportunity to be immersed in the data, as this was important for data analysis. Dwelling with data means that one is fully invested in data and spend extensive amount of time listening, reading, re-reading and interpreting (Gray, Grove & Sutherland 2017:270). The participants' responses and patterns were identified as well as their conceptual relationships. Data was reduced into codes and clusters until 2 themes, 5 categories and 10 sub-categories were developed (figure 4.2).

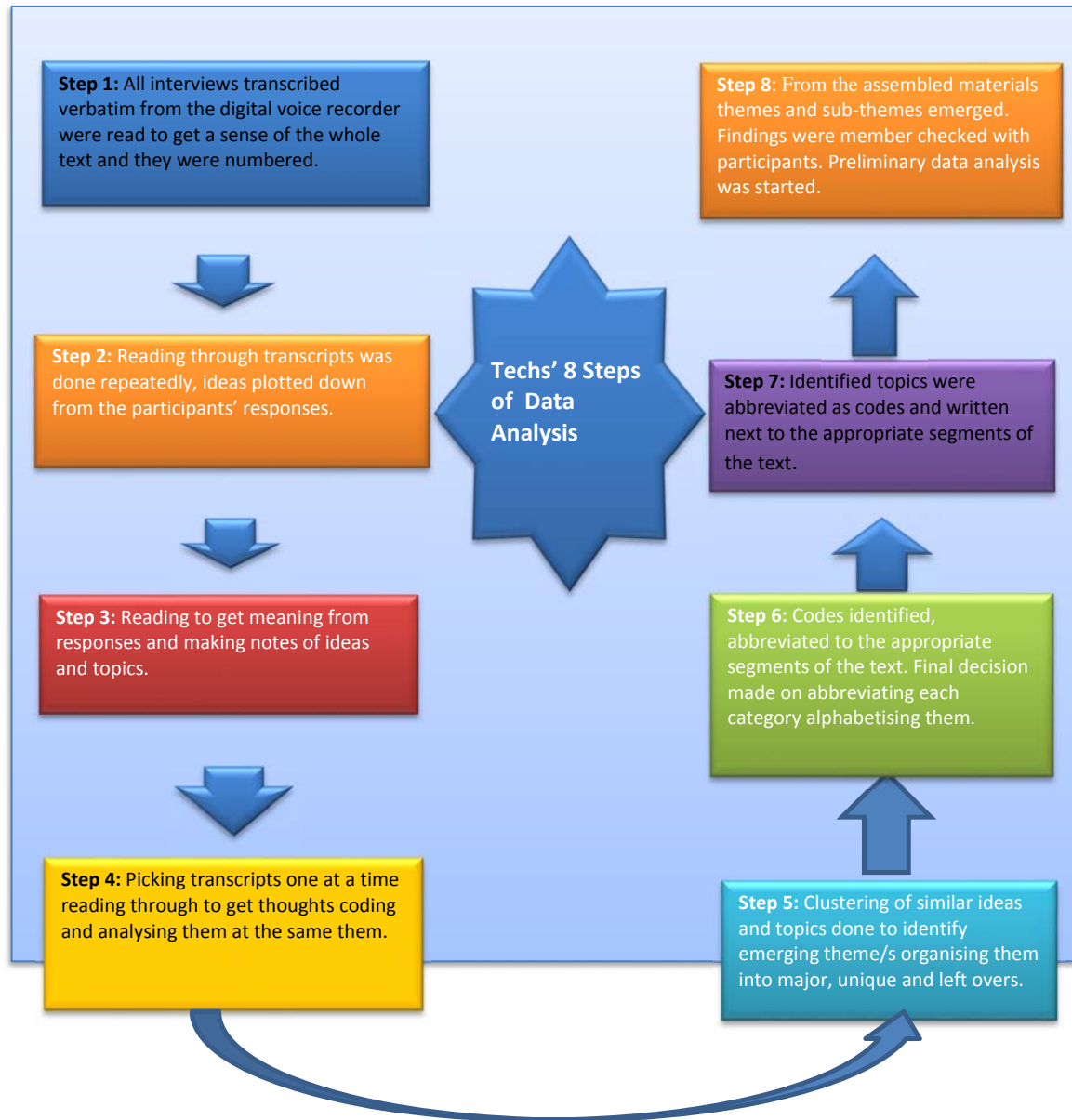


Figure 3.3 Tech's eight step process of qualitative data analysis (Creswell 2014:198)

The step-wise format or plan for qualitative data analysis as proposed by Tesch's

Step 1 – Reading through the data

The researcher got a sense of the whole by reading all the verbatim transcriptions carefully. This gave ideas about the data segments and how they look like or mean. The meaning emerged during reading all ideas as they come to mind were written down. The researcher carefully and repeatedly read the transcripts of all the participants and understood them.

An uninterrupted period of time to digest and thought about the data in totality was created. The researcher engaged in data analysis and wrote notes and impressions as they come to mind.

Step 2 – Asking questions about the meaning of the collected data

The researcher read through the transcriptions again and analyse them. This time the researcher asked herself questions about the transcriptions of the interview, based on the codes (mental picture codes when reading through) which existed from the frequency of the concepts. The questions were “Which words describe it?” “What is this about?” and “What is the underlying meaning?”

Step 3– Reduction of the collected

The researcher scaled down the data collected to codes and clusters based on the existence or frequency of concepts used in the verbatim transcriptions. The researcher then listed all topics that emerged during the scaling down. The researcher grouped similar topics together, and those that did not have association were clustered separately. Notes were written on margins and the researcher started recording thoughts about the data on the margins of the paper where the verbatim transcripts appear.

Step 4 – Abbreviation of topics to codes

The researcher started to abbreviate the topics that have emerged as codes and clusters. These codes needed to be written next to the appropriate segments of the transcription. Differentiations of the codes by including all meaningful instances of a specific code's data were done. All these codes were written on the margins of the paper against the data they represent with a different pen colour as to the one in Step 3.

Step 5 – Development of themes, categories and sub-categories

The researcher developed themes, categories and sub-sub-categories from coded data and the associated texts, and reduced the total list by grouping topics that relate to one another to create meaning of the themes and categories and sub-sub-categories.

Step 6 – Compare the codes, topics and themes for duplication

The researcher in this step rework from the beginning to check the work for duplication and to refined codes, topics and themes where necessary. Using the list of all codes she checked for duplication. The researcher grouped similar codes and recoded others were necessary so that they fit in the description.

Step 7 – Initial grouping of all themes and sub-themes

The data belonging to each theme were assembled in one column and preliminary analysis was performed, which was followed by the meeting between the researcher and co-coder (Annexure G). to reach consensus on themes, categories and sub-categories that each one has come up with independently

This was a difficult experience as a novice researcher, as data analysis is a rigorous process. Although the data analysis method was available, but in that there were no standardised rules to explain how data should be analysed (Grove et al 2015:88 & Polit & Beck 2012: 556). In this study, data analysis was done to organise, reduce and to provide structure to elicit meaning from the data (Polit & Beck 2012:556). In qualitative studies, data analysis involved the integration and synthesis of narrative non-numeric data that are reduced to themes and categorised with the aids of coding procedure (Brink et al 2013:58). Interpretation of the text was also done through the process termed by Heidegger as fusion of horizons (Holloway & Wheeler 2010:228). Therefore, the data collection and analysis was also guided by Heidegger on how participants expressed themselves and attached meaning to their experiences. Participants elicited meaning, experiences or perception from their point of view, rather than the researcher's perspective.

Inductive reasoning underpinned the philosophical stance by applying inferences from the specifics to the general premises.

3.5 MEASURES TO ENSURE TRUSTWORTHINESS

Trustworthiness according to Lincoln & Guba (1985:290) refers to the quality value of the final results and conclusions reached in a qualitative research. In qualitative research rigor is measured by its trustworthiness or the extent to which the findings are true to the data collected and analysed (Polit & Beck 2012:583). Lincoln & Guba (1985:290) identified criteria of credibility, transferability, confirmability and

dependability to encompass trustworthiness. This section is discussed in detail in chapter 3.

Credibility refers to confidence in the truth of the data and interpretations of them. In this study, Credibility was ensured when the researcher employed elements of researcher credibility, prolonged engagement, bracketing, peer debriefing, member checking and triangulation (Bryman 2012:390; Lincoln & Guba 1985:301; Polit & Beck 2012:585).

Researcher credibility had to do with the faith that can be put in the researchers' experience with the study phenomenon, qualifications and position to establish confidence in the data. Prolonged engagement was ensured as the researcher spends an extended period of time with the participants while conducting qualitative interviews. Researchers in qualitative studies need to practice *bracketing*, which refers to introspection of one's own biases that often come from one's own history and preconceptions (Polit & Beck 2012:740). *Bracketing* was used to hold at abeyance the researchers' experiences, knowledge and view about the study phenomenon. The researcher applied bracketing during the interviews with the participants, in order to avoid subjectivity and contamination of data with own perceptions (Streubert & Carpenter 2011:34). There was no conversation with the participants apart from the explanations needed to sign consent and fill in the forms for demographic data.

Triangulation was reinforced by the use of multiple study contexts and was thickly described. *Member checking* was made possible as the participants were given an opportunity to make an input about the findings and interpretation. *Peer debriefing* was ensured by holding sessions with objective peers to review and explore some aspects of the study (Polit & Beck 2012: 584-585).

Transferability refers to the extent to which the findings can be applied or have applicability in other similar settings or group. Transferability was ensured by providing thick descriptions of the research steps undertaken that can be audited and be transferred to other settings (Bryman 2012:390; Denegetu 2012:90; Lincoln & Guba 1985:301; Polit & Beck 2012:585). Various techniques were applied to enhance the transferability of the findings of this study such as the way of how information rich participants were selected. In this study, the researcher conducted purposive sampling through which participants who shared a wealth of insight about their experiences with

the researcher. Provide a thick description of the research context, participant experiences, and the research methodology can make it possible for application of this study in other settings (Polit & Beck 2012:585).

Confirmability refers to objectivity or neutrality of data which allows for agreement between two or more independent persons about accuracy, relevance or meaning of the data (Polit & Beck 2012: 723). Confirmability was enhanced by establishing an audit trail to enable other researcher to conduct a dependability audit trail (Lincoln & Guba 1985:328; Polit & Beck 2012:585). For the purpose of an audit trail the researcher did the following:

- all the feedback from the study supervisor was kept
- the research method, including the instrument development was recorded. The probing questions that were posed to the participants were captured
- intentions to write research articles on certain aspects of the findings were indicated
- the data reduction and reconstruction products such as drafts and the final reports were kept
- a detailed research report was presented for examination by nurse scholars

Dependability refers to the stability of data over time and over relatively similar conditions. In this current study, dependability was taken care of by being diligent in reporting every step of the research process and submitting for an audit (Polit & Beck 2012:585). The transcribed interviews and data analysis process were scrutinized by an independent reviewer. Relevant supporting documents such as audio tapes and verbatim transcribed notes were made available. The researcher established an audit trail also by presenting the coded interviews to the study supervisor and the findings and differences in the themes, categories and subcategories were noted (Polit & Beck 2012:585).

Authenticity

Authenticity refers to the extent to which qualitative researchers truthfully and honestly demonstrate that their data collection, analysis and interpretation is believable with no fabrication of findings (Polit & Beck 2012:720). In this study, all data collection and analysis was done with integrity and honesty. Respect to the participants who were

interviewed was demonstrated through verbatim references to their original data such that the meaning is truly expressed in its original form unaltered as described by them without any coercion to suite the researcher and the independent coder.

Reflexivity

Reflexivity is defined by Grove et al (2013:707) as a self -awareness and critical examination of the interaction between self and data during collection and analysis of qualitative data which may lead the researcher to explore personal feelings and experiences that influence the study. Therefore, in this study reflexivity was relevant for the researcher to examine personal feelings and experiences that could have influenced the study and ensure freedom from researcher bias.

In qualitative research trustworthiness of data need to be demonstrated. The central feature of the effort is to confirm that the findings accurately reflect the experiences and viewpoints of participants (Polit & Beck 2012:585).

3.6 ETHICAL CONSIDERATION

Ethics is defined as system of moral values that is concerned with the degree to which research procedures adhere to professional, legal and social obligations to a study (Polit & Beck 2012:727). Ethical considerations in this were ensured by demonstrating respect of the rights of the study institution, participants and scientific integrity. This section is discussed in detail in Chapter 3.

Protection of the rights of the study institution

The rights of the institutions were protected by obtaining ethical clearance from the Ethical Research Higher Degrees Committee of the Department of Health Studies at the University of South Africa (UNISA) (Annexure A). Permission to conduct the study was secured from the Limpopo Department of Health and Social Development Research Ethics Committee (Annexure B). Permission was requested and granted by the District Executive Managers of Mopani District (Annexure C). The names of the sub-districts where the research was conducted were given codes to adhere to the principle of anonymity.

Protection of the rights of the participants

Informed and written consent was obtained from the participants after study was well explained to them in terms of the benefits and risks ratio, right to withdraw from the study at any time they feel uncomfortable and a counsellor was arranged for them if needed. Permission was sought from the participants for tape-recording the interview (Annexure D). Other elements of consideration were respect for confidentiality, anonymity, human dignity, fair treatment and right to full disclosure.

Scientific integrity

Scientific integrity has been maintained by correctly citing sources, avoiding falsification of data and plagiarism. All the chapters with resources used were submitted to the study supervisor for expert supervision and corrections.

3.7 CONCLUSION

This chapter described the research design and the method which was used to conduct the study. A qualitative, non-experimental, explorative and descriptive study design was used based on the phenomenological tradition. The research method such as the population, sampling, sampling techniques, data collection, data analysis, measures of trustworthiness, ethical considerations and scientific integrity were also described.

CHAPTER 4

DATA ANALYSIS AND INTERPRETATION OF THE RESEARCH FINDINGS

4.1 INTRODUCTION

The purpose of this study was to explore and describe the experiences of nurse managers relating to the implementation of collaborative TB/HIV activities. This chapter presents data analysis and findings of the study phenomenon. The demographic information of participants was analysed in context prior to the presentation of the main themes, categories and sub-categories. This occurred when the conceptual patterns and codes emerged during the repeated analytical reflection of the data (Polit & Beck 2012:744). Tesch's (Creswell 2014:198) open coding qualitative data analysis method was used to analyse data and findings were presented in the form of two themes, five categories and 14 sub-categories for empirical evidence. The direct quotes from the participants were used as meaning units and supported by literature where needed.

The processes of this chapter occurred during the *third stage* and the researcher was engaged in data collection, analysis and interpretation of the research findings. Use of the phenomenological tradition involved application of the descriptive and interpretive phenomenological research with the elements of intuiting, analysing, bracketing and describing which guided the researcher to apply scholarly thinking during the analysis process (Detailed in chapter 3 section). Interpretation of the text was also done through the process termed by Heidegger as fusion of horizons (Holloway & Wheeler 2010:228). Therefore, the data collection and analysis was also guided by Heidegger on how participants expressed themselves and attached meaning to their experiences. Participants elicited meaning, experiences or perception from their point of view, rather than the researcher's perspective.

Inductive reasoning underpinned the philosophical stance by applying inferences from the specifics to the general premises.

4.2 DATA ANALYSIS

Data analysis is defined by Polit and Beck (2012:725) as a process of speculation, fitting data together, making the invisible obvious and verification of data. In this study,

the process was used by the researcher systemically to organise and synthesise the research data making descriptions and inferences on the study phenomenon. Data analysis was ongoing during collection and throughout the study. In this study data was analysed empirically guided by Tesch's approach of qualitative analysis (Creswell 2014:198).

Data analysis presentation was that of the demographics of the participants, themes, categories and sub-categories from the data obtained from the in-depth individual unstructured interviews.

4.2.1 Demographic analysis of the participants

This study comprised of eight MM's and six OM's who were individually interviewed on the study construct respectively. There were nine females and five males. This reflects the nature of the nursing profession which is female dominated even at management level. However, one of the males (P12 MM) who work with the development of strategic documents, made a significant contribution about the challenges related to poor planning of the program.

The majority of nurse managers were over forty and under fifty years' old which could have reflected a certain level of professional maturity. The target population was young, vibrant and at their productive age, whose experiences were enriched by their engagement with the program. They were all working in Mopani district, in four sub-districts there were two and more participants except sub-district 5 where one participant withdrew from the study due to illness. The context was one of the districts where the TB/HIV initiative was rolled out in 2009 (Uwimana 2012:658). They were all registered nurses according to the Nursing Act No.33 of 2005 (South Africa 2005:34), four had nursing degrees, four Honours, one Master of ARTs and one acquired the degree outside the nursing field. Most of them were well educated and informed, and thus their responses during the interviews were of quality as rich informants on the study construct. They were able to identify challenges of the program which are the key findings of this study. They were all experienced working as nurse managers and trained on courses related to TB/HIV integration which enhanced their expertise in implementing the initiative.

Presentation of the themes, categories and sub-categories

Findings were tabled as two themes, five categories, ten sub-categories and meaning units (Table 4.1).

Table 4.1: Themes, categories, sub-categories and meaning units

Main themes	Categories	Sub-categories	Quotes /meaning units
Theme 1 Implementation of the collaborative TB/HIV activities	1.1. Training of staff members	1.1.1 Training on treatment protocol for TB/HIV management	<p><i>"The guidelines stresses that all patients that enter the health facility should be screened for TB and counselled and tested for HIV" (P10 MM).</i></p> <p><i>"Uhm, yes, my experiences, that I have seen is that all patients that are HIV positive are screened for TB and those without symptoms for TB are initiated on IPT and most of them do not have develop TB those that are having TB are counselled and tested for HIV and if tested HIV positive they initiate them on ART as guided by guidelines. The other thing is that those who are co-infected are at least initiated on ART" (P03 MM).</i></p> <p><i>"What I like most is that nurses are trained and each facility has at least a nurse that is trained for HIV/TB collaboration, because we have trainings for HIV and trainings for TB and the one that has comprehensive information of how to manage the TB/HIV co-infected patient" (P04 MM).</i></p> <p><i>"We have been trained on national guidelines of which that assist us with information to collaborate the TB and HIV activities" (P10 OM).</i></p> <p><i>"...indicate that....and also in TB guidelines there information about HIV is included, and how to initiate IPT, so that is very good experience" (P07 MM).</i></p>
		1.1.2 Treating patients for TB/HIV holistically	<p><i>"...it is a very good experience, because we have to manage a patients holistically"- it means if a client is HIV positive we don't</i></p>

			<p><i>exclude TB, we have to make sure that we treat that patient collaboratively” (P07 MM)</i></p> <p><i>“I have realized that personally as a manager it becomes easy for one to monitor and even to manage patients holistically. Since TB been the most challenging opportunistic infection in people living with HIV” (P13 OM)</i></p>
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Main themes	Categories	Sub-categories	Quotes /meaning units
Theme 2 Challenges in the implementing of collaborative TB/HIV activities	2.1 Shortage of resources	2.1.1 Shortage of nurses	<p><i>“But also we experience shortage of staff because nurses are retiring some are moving for greener pastures” (P11 OM).</i></p> <p><i>“the other thing is the shortage of staff, because we don’t have many nurse because some attend trainings others retired and production of nurses is slow, we have got a lot of the patients with little staff is difficult to manage patients fully in one consultation room” (P14 OM).</i></p>
		2.1.2 Shortage of material resources	<p><i>“The other thing is that HIV program is funded by conditional grant and they have enough budget, with us, TB program we are funded from equitable fund so we do not have much funds so we TB coordinators we do our trainings ourselves. We always train professional nurses for TB/HIV collaboration, and lay counsellors are rarely trained because we have limited resources” (P03 MM).</i></p> <p><i>“And at present moment as we speak, the reality is that with HIV mainly is being funded through the conditional grant HIV program has a lot resources that are available, like the budget for trainings and for equipment” (P12 MM).</i></p>
		2.1.3 High patient work load	<p><i>“Uhm, from what they (nurses at the facility) most of them (nurses) feel that we are bringing</i></p>

			<p><i>a lot of work to them. And yet they experience shortage of personnel at the facilities and are new program everyday” (P04 MM).</i></p> <p><i>“It’s long you know that is facility related is the issue of the shortage of staff members, you know, they cannot cope with the work there are many patients...” (P13 OM).</i></p>
	2.2 Poor planning	2.2.1 Parallel programs	<p><i>“What I have realized as a nurse manager is that there is still a challenge in integrating the two programs. Because they are treated in a parallel manner, let me give an example, you find that there are workshops that are strictly for TB and the workshops that are strictly for HIV, In these workshop the content includes both programs, the challenge is that we have the TB program manager and we still have the HIV program manager (at the district office)” (P02 MM).</i></p> <p><i>“We have the TB manager and the HIV manager, and the two do not share information. You find that the HIV unit is able to have its own plan in terms of its deliverables. Yaa... programs are run in a parallel manner The other unit is silent so it makes the whole thing not go well” (P09 MM).</i></p>
			<p><i>“But then at the present moment we are having a situation where you would have TB planning for its resources and HIV planning for its resources, this culture prevails at the provincial office... but our plans are not organised and we duplicate activities as we are not planning together” (P12 MM).</i></p>
			<p><i>That’s the main barrier poor planning at the district, they plan meeting without talking to each other and causes conflict at sub-district level” (P01 MM).</i></p> <p><i>“Since I was appointed at the district office, the problem was poor planning of TB/HIV activities at the province and district level, which usually</i></p>

			<i>caused power struggle you know..... So my experience is that in management sometimes, we do not pull together as a team" (P09 MM).</i>
	2.3 Lack of support	2.3.1 Lack of support by management	<p><i>"Uhm, I think I do not have a great support (showing signs of being very much concerned) from management at the sub-district level, is like I'm working alone and that demotivate me" (P03 MM).</i></p> <p><i>"And when we request nurses from the facilities to attend TB/HIV trainings we are not supported by management. So to me the support is so slim, very much slim.... So that stresses me a lot" (P04 MM).</i></p>
			<p><i>(the staff get so stressed up because of workload, so it will be good if the district can conduct debriefing sessions for nurses at least once in a quarter" (P11 OM).</i></p> <p><i>"(Took a deep breath) some of the things are demotivating, it's demotivating because when you report to management about patient workload, you don't get support from managers" (P14 OM).</i></p>
	2.4 Patient related challenges	2.4.1 Non-disclosure	<p><i>"Even though our patients are counselled but some of them still fear to disclose their status when come to clinics for services, so it is difficult to render integrated services" (P05 MM).</i></p> <p><i>"You find that the patient will be free to be supported for TB and not disclose for HIV, and most of the HIV positive patients died due to HIV related diseases. So is it is difficult to render integrated TB/HIV services to such patients. So that's where now we are experiencing some challenges" (P13 OM).</i></p>
		2.4.2 Difficulty in tracing	<p><i>"So it is difficult to trace them because they give us wrong addresses and wrong cell phone numbers and as I indicated some go without informing us" (P05 MM).</i></p> <p><i>"I also experienced that also patients make it difficult to implement the program. They don't</i></p>

			<p><i>take treatment as required and they don't come back to facilities. They give wrong addresses. So is difficult to trace them, others collect treatment from 2 or 3 facilities without telling us" (P06 OM).</i></p> <p><i>The challenging side of it, is when patients are initiated on treatment and they don't adhere, and when they are traced they are not found because they give wrong addresses and wrong cell phone numbers" (P08 OM).</i></p>
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Table 4.1 presents an overview of all the themes, categories and sub-categories generated from data as the findings of the study. The findings of the analysed data were discussed and literature control applied where necessary.

The researcher identified and examined the themes in view of literature with intent to describe the conceptualization of nurse managers in relation to the implementation of the collaborative TB/HIV activities. The information about these experiences was collected from the individual participants. The research question addressed was:

Tell me, what are your experiences as a nurse manager in relation to the implementation of the collaborative activities at management level?

Responses from participants on the phenomenon under study enabled the researcher to be able to identify the meaning attached as experienced in their real world in the context of their emic perspective.

4.2.2 PRESENTATION OF THE DATA ANALYSIS AND INTERPRETATION

Table 4.1 shows the themes, categories and sub-categories which the researcher generated from the most frequently given answers to the questions answered by the participants, and the interpretation thereof. The themes were discussed with references being made to the literature that was reviewed on the phenomenon under study. There are various definitions of the word theme by different sources, but generally it means it is a phrase that identifies what a section of data means. Saldana (2013:175-176) gives the word theme the following definition: "A theme is an abstract entity that brings meaning and identity to a recurrent experience and its variant

manifestations. As such, a theme captures and unifies the nature or basis of the experience into a meaningful whole”.

4.2.2.1 THEME 1: Implementation of the collaborative TB/HIV activities

The main aim of this study was to investigate how TB and HIV services can be delivered preferably at the same time and location to ensure that HIV positive patients are screened for TB and TB patients are counselled and tested for HIV (WHO 20012:14). This theme therefore explored and described the understanding of the collaborative TB/HIV activities as expressed by the participants. They applied their knowledge and experience to express the benefit of the construct and confirmed that the context had the potential to implement the initiate meaningfully. Out of this theme one category and four subcategories emerged.

Category 1.1: Training of staff members

Training is defined by Cambridge Advanced Learner's Dictionary (2013, sv “training”) as teaching, or developing in oneself or others, any skills and knowledge that relate to specific useful competencies. It is further described as the process for providing required skills to the employee for doing the job effectively, skilfully and qualitatively. The training on the study construct of employees in the study context is not continuous, but it is periodical, given in specified time and informed by new relevant information. Generally, this training is given by an expert or professional in the related field or job. Training has specific goals of improving one's capability, capacity, productivity and performance (Cambridge Advanced Learner's Dictionary 2013, vs “training”). Participants expressed that they were trained on issues related to the implementation of TB and HIV activities. This finding assumes that if the participants implement the information obtained TB/HIV co-infection could be reduced. Participants in this study acknowledged that staff members are comprehensively trained and acquired information that guides them on how to manage the TB/HIV co-infected patients. One participant who is the implementer said:

“What I like most is that nurses are trained and each facility has at least a nurse that is trained for HIV/TB collaboration, because we have trainings for HIV and trainings for TB and the one that has comprehensive information of how to manage the TB/HIV co-infected patient” (P04 MM).

Another participant confirmed that:

“We have been trained on national guidelines of which that assist us with information to collaborate the TB and HIV activities” (P10 OM).

The statement was supported by the following MM who supervises the implementation and said:

“Indicate that....and also in TB guidelines there information about HIV is included, and how to initiate IPT, so that is very good experience” (P07 MM).

Training on IPT is critical and a core activity for the implementation of the collaborative TB/HIV program by nurse managers. IPT is the prophylaxis that is given to eligible HIV positive patient to prevent active TB. The MMs are the nurse managers the coordinate training, activities and supervise implementation of the program hence been them knowledgeable about the training program.

Subcategory 1.1.1: Training on treatment protocol for TB/HIV management

Treatment protocols are standard operating procedures in this context for TB/HIV management. The participants demonstrated comprehensive knowledge of implementing the protocol for the management of the co-infected patients. The subcategory also, suggests that following protocols contribute to render services that improve health care outcomes. On this finding, more than five participants responded qualitatively which was well summarised by the following statement:

“Uhm, yes, my experiences, that I have seen is that all patients that are HIV positive are screened for TB and those without symptoms for TB are initiated on IPT and most of them do not have develop TB those that are having TB are counselled and tested for HIV and if tested HIV positive they initiate them on ART as guided by guidelines. The other thing is that those who are co-infected are at least initiated on ART” (P03 MM).

Treatment protocols are based on a number of guidelines and policy recommendations as developed by the WHO (2012:10) to improve the management of TB/HIV management. The study participants had first-hand experience in the roll out of the program from the screening, counselling, testing and initiating patients on IPT and ART.

Subcategory 1.1.2: Treating patients for TB/HIV holistically

The patient as a human being has a right to be treated holistically, which denote that, the patient has body, mind and spirit (Monareng 2009:169). In this study context, treating TB/HIV patients holistically meant to diagnose TB on all patients coming for consultation then counsel and test them for HIV as directed by the national guidelines to exclude either TB or HIV condition and not to focus on one. If the patient has co-morbid conditions, should then be treated for all conditions by one nurse in the same consultation room. The understanding of this holistic care was confirmed by the following excerpt:

“it is a very good experience, because we have to manage a patient holistically”- it means if a client is HIV positive we don’t exclude TB, we have to make sure that we treat that patient collaboratively” (P07 MM).

Another participant confirmed this finding by responding as follows:

“I have realized that personally as a manager it becomes easy for one to monitor and even to manage patients holistically. Since TB been the most challenging opportunistic infection in people living with HIV” (P13 OM).

Another participant clarified holistic care as follows:

“The guidelines stresses that all patients that enter the health facility should be screened for TB and counselled and tested for HIV” (P10 MM).

Although holistic care is understood differently in common language of patient care in terms of caring for body, mind and spirit, it was interesting to understand it from the perspective of the study construct to mean screening for TB, counselling and testing for HIV. Most of the participants both MMs and OM in the study expressed the understanding of training as a key strategy to be empowered as implementers of the of the collaborative TB/HIV activities. The significant findings of theme included training, treatment protocol for the TB/HIV co-infected patients and treating patients for TB/HIV holistically. Although this treatment protocols are based on the WHO (WHO 2012:30) national guidelines, however the implementation of the collaborative TB/HIV

activities were implemented based on the country's specific process as cascaded to the study context.

4.2.2.2 THEME 2: Challenges in the implementation of the collaborative TB/HIV activities

In this context, challenges are the difficulties that nurse managers are faced with in their efforts to comply with the implementation of the WHO (WHO 2012:9) recommended TB/HIV activities. A challenge was what was perceived by participants as a hindrance to successful compliance with the national guidelines. Findings from this study suggested that participants experienced various challenges that hindered effective and efficient implementation of the collaborative TB/HIV activities. These challenges were viewed as setbacks to them to achieve the desired health outcomes. Although staff members were well trained in TB/HIV national guidelines, this knowledge has yet to be translated into appropriate attitudes, best practises and influence on both human and material resources. In spite of the information acquired during training they seemed to be experiencing stressful in the work place. The challenges reported emanated from shortage of staff, poor planning, lack of support and patient care related challenges.

Category 2.1: Shortage of resources

Shortage of resources referred to by participants in this study was shortage of human and material resources which were required for the sustainability of the collaborative TB/HIV program. According to participants of the current study, the shortage of human and material resources and inadequate funding negatively affected their performance. This was supported by the following of excerpts:

“and remember there are no nurses, I told you that most of the time they attend trainings... so you may find that only 1 or 2 nurses in a day, so they are expected to counsel and test for HIV, screen for TB, record information to all registers there is a lot to alone, I realized that they are overworked, they request nurses' same days and there are no enough nurses, and it contribute to shortage” (P06 MM).

Another participant said:

“You plan training from then ...from the PHC management you are told that there is a shortage of staff so you can’t nurses to attend” (P09 MM).

Most of the OMs reported shortage of staff issues as hindrance to the implementation of the collaborative TB/HIV activities. Challenges related to staff shortage was compounded by high rate staff attrition and high patient work load.

Subcategory 2.1.1 Shortage of nurses

Participant revealed that shortage of staff in the study context is aggravated by movement of personnel due to retirements, greener pastures and others attending training. The participants perceived that they are depleted of man power to implement the program which ends up compromising its quality. The findings were supported by the following statements.

“But also we experience shortage of staff because nurses are retiring some are moving for greener pastures” (P11 OM).

The following participant expanded the response and said:

“the other thing is the shortage of staff, because we don’t have many nurse because some attend trainings others retired and production of nurses is slow, we have got a lot of the patients with little staff is difficult to manage patients fully in one consultation room” (P14 OM).

Shortage of staff impacts the work environment negatively Chebet (2015:56) posited that conducive working environment is a contributory factor to improvement of performance and productivity. Participants expressed understaffing as a barrier to the meaningful implementation of the program. Adequate staffing is one of the essential elements to providing high quality care.

Subcategory 2.1.2: Shortage of material resources

Shortage of material resource was perceived as impacting on service delivery negatively. In this context material resources meant funding for TB program and

consumables like specimen bottles for collecting bloods, test kits for HIV and the sputum bottles. The MMs as planners and coordinators of the program expressed that they experienced disparity in relation to allocation of resources. Participants reported mainly that funding is a challenge particularly for conducting TB program training. The training conducted mostly catered for professional nurses and deprived the lower categories especially lay counsellors. The issue of funding is seemingly paramount to the sustainability of the program as revealed in the following responses:

“The other thing is that HIV program is funded by conditional grant and they have enough budget, with us, TB program we are funded from equitable fund so we do not have much funds so we TB coordinators we do our trainings ourselves. We always train professional nurses for TB/HIV collaboration, and lay counsellors are rarely trained because we have limited resources” (P03 MM).

In addition, another MM supported this finding and expressed as follows:

“And at present moment as we speak, the reality is that with HIV mainly is being funded through the conditional grant HIV program has a lot resources that are available, like the budget for trainings and for equipment” (P12 MM).

“Another challenge that I have noticed is the limited supply of consumables for monitoring this patients, for example, specimen bottles for collecting baseline bloods from TB/HIV co-infected patients. So sometimes we do experiences shortage of this consumables” (13 OM).

There seemed to be a difference how the two participants viewed the issue of funding. These views were based on the rationale that the TB program is funded through the equitable share and the HIV is funded through conditional. Funding for TB program is limited to services delivery and underfunded for training: whereas funding for HIV is comprehensively funded for training and equipment. Donors or funders supporting TB and HIV program prefer that the collaborative TB/HIV research and training activities should synergised (Linguissi et al 2016:62). However, this donors and researchers must invest in funding TB/HIV services integration to be successful and to ensure acceleration of control measures to eradicate TB and HIV co-infection.

findings suggest that lay counsellors offer their services under direct supervision of professional nurses, of which is not possible due staff shortage as alluded.

Subcategory 2.1.3 High patient work loads

This subcategory was strongly perceived as the challenge that impacts on the implementation of the program. The study context carries high number of patients that are remaining on ART and those that are TB/HIV co-infected on ART. The program is complex and having emerging activities that compels changes timeously, and affect service delivery. Such workloads place a burden on the staff, often leaving them exhausted or even burnout. The finding was supported by the following meaning units:

“Uhm, from what they (nurses at the facility) most of them (nurses) feel that we are bringing a lot of work to them. And yet they experience shortage of personnel at the facilities and are new program everyday” (P04 MM).

Another participant added that:

“I also experienced that we have a lot of patients that are TB/HIV co-infected, but when you compare with the staff that we have is frustrating, we can’t provide holistic care as indicated in the guidelines is challenging really” (P10 OM).

Two participants lamented that:

“It’s long you know that is facility related is the issue of the shortage of staff members, you know, they cannot cope with the work there are many patients...” (P13 OM).

“the staff get so stressed up because of workload, so it will be good if the district can conduct debriefing sessions for nurses at least once in a quarter” (P11 OM)

Participants indicated that work place environment was stressful.

The reduced staff levels seemed to increase the workload of the nurse managers in terms of the number of patients attended to daily. In addition, the heavy workloads also limit the amount of time the nurse managers can devote to each patient, making it difficult to provide adequate and recommended care according to the national policy guidelines.

Category 2.2: Poor planning

Planning is defined by Merriam Webster dictionary (2017. sv “planning”) as a key element that gives direction, cohesion and thrust that causes personnel to focus on goals, objectives and the process of making to achieve or do something. According to

Mitchell (2012:6), "Planning usually interpreted as a process to develop a strategy to achieve desired objectives, to solve problems and to facilitate action." Therefore, joint planning between the TB and HIV program managers is a key activity to enhance implementation of TB/HIV activities. Participants perceived that most of the program activities were not planned jointly and that caused duplication of services and conflicts to the implementers. The findings are confirmed by the following statements:

"The trainings are coordinated at the district office and is like they are not planned well because there are invitations for TB and the one for HIV...you can see that if these trainings can be combined will be better" (P06 MM).

The other participant reported that:

"... but then at the present moment we are having a situation where you would have TB planning for its resources and HIV planning for its resources, this culture prevails at the provincial office...but our plans are not organised and we duplicate activities as we are not planning together" (P12 MM).

Some participant rated poor planning as an important barrier to successful implementation of the program and disrupts the close relationships between the TB and HIV managers which is often characterised by conflicts. A barrier is defined by Merriam Webster (2017) as something immaterial that separates and maybe behavioural as demonstrated in this excerpt:

"That's the main barrier poor planning at the district, they plan meeting without talking to each other and causes conflict at sub-district level", (P01 MM).

Another participant expressed of poor planning as a challenge against team work as mentioned in the following statement:

"Since I was appointed at the district office, the problem was poor planning of TB/HIV activities at the province and district level, which usually caused power struggle you know... So my experience is that in management sometimes, we do not pull together as a team" (P09 MM).

Team work is an essential process of function in management; nursing activities are care carried out in teams where each member uses skills to best advantage especially in the experience of shortage of staff (Seeling et al 2014:273). According to

participants in this study, team work has been identified as a contributory factor to poor planning.

Subcategory 2.1.1: Parallel programs

In this study, participants reported that the programs are implemented in a parallel fashion which hinders the collaborative implementation of TB/HIV activities. Their concerns were that managers of TB/HIV don't share ideas with each other on both programs thus the lack of collaboration in TB/HIV activities. The participant further indicated at the provincial, district up to sub-district level that there are nurse managers for TB and for HIV respectively. These are confirmed by the following statements.

“But what I have experienced is that managers (district nurse managers) run the program in silos. They develop individual plans without sharing ideas, for example you find that there is HIV campaigns here and TB campaign there, and that is the duplication of task” (P01 MM).

Another participant made a valuable response that clarified how the program functions in a parallel manager which poses a challenge to how workshops are planned. It is acknowledged that this practice leads to poor planning of training, meetings and data management reviews

“What I have realized as a nurse manager is that there is still a challenge in integrating the two programs. Because they are treated in a parallel manner, let me give an example, you find that there are workshops that are strictly for TB and the workshops that are strictly for HIV, in these workshop the content includes both programs, the challenge is that we have the TB program manager and we still have the HIV program manager (at the district office)” (P02 MM).

Conducting workshops is to the WHO (2012:8) the updated policy emphasizes the need to conduct integrated workshops in order to establish mechanism for delivering integrated TB and HIV services. The workshops for TB and HIV programs should collaborate with each other and other programs to ensure success and quality assured services. Although these workshops are intended for decision makers at the upper echelons in the health field, nurse managers of TB control and HIV program are the main custodians of the processes (WHO 2012:8).

Category 2.4: Lack of support

Support is defined by Merriam Webster (2017, “vs” “support”) as an act of providing a bases for the existence of something or to serve as foundation to keep it from fainting loosing courage and giving up. In this study, although the participants are nurse managers at middle and operational level, they needed support from senior management at district and PHC level. However, in this study participants expressed the frustration of lack of support. The subcategory under this category is lack of support by management.

Subcategory 2.3.1 Lack of support by management

Participants expressed that support was suboptimal and that is assumed to have impacted on their performance and quality care health outcomes. One participant added that she experienced frustrations due to lack of managerial support that led to loneliness as supported by the following statement:

“Uhm, I think I do not have a great support (showing signs of being very much concerned) from management at the sub-district level, is like I’m working alone and that demotivate me” (P03 MM).

The nursing profession is a people skills vocation that deals with complex environmental issues, thus staff members at different levels need support from one another.

Support from senior management need to be seen and experienced at the time when needed most. One participant lamented that:

“And when we request nurses from the facilities to attend TB/HIV trainings we are not supported by management. So to me the support is so slim, very much slim...So that stresses me a lot” (P04 MM).

Another participant expressed frustration for lack of support by management when over loaded with work. Some of the management practices lead to staff demotivation and damaging of relationships between implementers and supervisors.

“(Took a deep breath) some of the things are demotivating, it’s demotivating because when you report to management about patient workload, you don’t get support from managers” (P14 OM)

According to Nikfam, Pourghane, Ebadi, Provision (2017:8), establishing continuous supportive relationships among nurse managers at different levels is necessary to reduce moral tensions, improve patient satisfaction and cooperation of staff members. It seemed according to the participant that management was likely to ignore their request for help rather than providing assistance in reducing stress and demotivation.

Category 2.4: Patient care related challenges

Patient is defined as a person who is physically or mentally ill, receiving or registered to receive medical treatment or nursing care (Freshwater & Maslin-Prothero 2005:440). Patients who have suffered TB and HIV co-infections are at risk of poor health outcomes. Some of them suffer due to illness, hopelessness and failure to perform recommended behaviours by nurses. Participants identified their difficulties in implementing TB/HIV activities related to the program as raised by patients. These challenges were perceived to be compounded by stigma that led to lack of disclosure and delays in seeking medical attention. This kind of behaviour had negative implications on the provision of quality TB/HIV services. Under this category there were two subcategories which were non-disclosure and difficulty to trace.

2.4.1 Non-disclosure

Disclosure is an act of making something known or disclosing something such as secretes information known (Oxford Advanced Learners Dictionary 2010. sv “disclosure”). Disclosure has been observed as a process of making people know of one’s diseases status, which can vary from partial to full disclosure. For the reasons of stigma attached to HIV, most patients have issues with regard to disclosure to the larger community. The participants affirmed that patients preferred to disclose TB status compared to HIV. The finding is supported by the following statements:

“Even though our patients are counselled but some of them still fear to disclose their status when come to clinics for services, so it is difficult to render integrated services” (P05 MM).

Non-disclosure in the health system is one of the most crucial related barrier that negatively affects recovery of patients. People commonly are afraid to disclose their HIV status due to stigma even though counselled as one of the participants mentioned. This attitude makes it difficult for nurses to render the integrated services effectively.

One of the participants expressed her experience in treating patients who are co-infected but failed to disclose their HIV status as demonstrated in the following excerpt:

“The other experience is that those who are TB/HIV co-infected and attached to DOT supporters, allowed the supporters to support them to take TB treatment, so HIV was not disclosed. That is why I say collaborating TB and HIV is a bit challenging” (P11 OM).

Most of the TB/HIV co-infected patients die prematurely because of non-disclosure of the HIV status that could have been effectively treated.

“You find that the patient will be free to be supported for TB and not disclose for HIV, and most of the HIV positive patients died due to HIV related diseases. So is it is difficult to render integrated TB/HIV services to such patients. So that's where now we are experiencing some challenges” (P13 OM).

The fear of stigma by most of the HIV patients makes them to be lost to follow up. Therefore, according to Seeling et al (2014:273), efforts should be to intensify information on TB/HIV, fight related stigma and discrimination. This is confirmed by the following response:

“What I experienced as the nurse manager, is the stigma that was attached to HIV as a condition, it mostly affected patients who have TB not to opt for HIV counselling and testing. And those who opted for HIV testing they refused to disclose their HIV status...” (P14 MM).

In 2016, 374 000 people who had both TB and HIV are estimated to have died, those who have HIV and TB co-infection when they die, are internationally reported as having died of HIV infection (Kanabus 2017:2). It seemed according to the

participant's patients who were not afraid to disclose their TB condition but has fear to disclose HIV status unto death.

Subcategory 2.4.2 Difficult to trace

The participants reported that they experienced various difficulties during integration of TB/HIV activities due to loss to follow up. The difficulties reported emanates from patients' lack of co-operation with health care providers in terms of supplying correct information and defaulting on taking treatment. Some of the difficulties were expressed as self-referrals to different health facilities without communicating their movements or intentions. The finding was supported by the following statements.

"So it is difficult to trace them because they give us wrong addresses and wrong cell phone numbers and as I indicated some go without informing us" (P05 MM).

"I also experienced that also patients make it difficult to implement the program. They don't take treatment as required and they don't come back to facilities. They give wrong addresses. So is difficult to trace them, others collect treatment from 2 or 3 facilities without telling us" (P06 OM).

The challenging side of it, is when patients are initiated on treatment and they don't adhere, and when they are traced they are not found because they give wrong addresses and wrong cell phone numbers" (P08 OM).

Three of the participants talked about difficulty of tracing patients for coming back for treatment and follow ups. The relationship between nurses and patients seems to be unhealthy as to how patients would leave without communicating with them. This experience can be averted by nurse managers to be kind to patients treat them the same be calm and speaking normally to them (Carlsson et al 2014:5).

This theme presented categories and subcategories that were perceived as challenges experienced by participants during the implementation of the collaborative TB/HIV activities. The most important challenges were related to shortage of resources, poor planning, lack of support and patient care related challenges. Patient related challenges need to be explored from the data generated from the study and other related sources to provide more insight about what TB /HIV patients go through and how nurse managers can provide best practices in the TB/HIV integration.

4.3 CONCLUSION

This chapter focused on data analysis presentation and interpretation of the findings of the study. Data was analysed qualitatively guided by Tesch's open coding analysis method. Major themes, categories and subcategories that emerged from the generated data were tabled and discussed as exhibited on table 4.1. Meaning units for each theme were presented by appropriate verbatim quotations from the participants' words were indicated as supporting statement of the findings.

Chapter 5 presents discussions, conclusions, limitations and scope and implications of the study.

CHAPTER 5

DISCUSSIONS, CONCLUSIONS, LIMITATIONS AND IMPLICATIONS

5.1 INTRODUCTION

In this chapter the research findings were discussed as conclusions which were derived from the meaning that nurse managers attached to the grand tour and probing questions asked. The analysis of responses about their experiences on implementing the collaborative TB/HIV activities led to the emergence of two major themes, categories and subcategories which were on implantation of the collaborative TB/HIV activities and challenges related to it. The processes of this chapter occurred at the *fourth stage* of the study and the researcher summarised the findings, presented the discussions, limitations and scope and implications of the study.

Implications to nursing practice, education, community and research were described (Grove et al 2013:590).

5.2 PURPOSE OF THE STUDY

The purpose of this study was to explore and describe the experiences of nurse managers relating to the implementation of collaborative TB/HIV activities at management level.

Research Objectives

In order to answer the research question, the objectives of this study were to:

- Explore and describe the experiences of nurse managers in relation to the implementation of collaborative TB/HIV activities at management level.
- Identify the barriers that hinder the nurse managers to implement the collaborative TB/HIV activities at management level.

This study described the experiences of nurse managers in relation to the implementation of the collaborative TB/HIV activities.

5.3 RESEARCH METHODOLOGY

The research design of this study was a qualitative, non-experimental, explorative, and descriptive, based on the phenomenological philosophy. The different research methods and techniques that were used to empirically to investigate the research

problem were population, sample, sample technique, sample size, data collection and analysis. An in-depth individual unstructured interview was held with 14 participants that answered the following grand tour question: tell me “What are your experiences as a nurse manager in relation to the implementation of collaborative TB/HIV activities?”

5.4 DISCUSSIONS OF THE RESEARCH FINDINGS

The first objective of the study was achieved and discussed as theme 1. Although only two themes were generated as findings, the consistency and quality of the meaning units as reports from the participants and even the language was striking. The second theme dominated the findings because of their level function and authentic experience with program. The number of categories and subcategories were collapsed and information integrated with other categories. This study demonstrated a number of positive experiences by nurse managers which credits the good implementation of the program.

Heidegger’s philosophy of interpreting research interviews was chosen in this study because it supports the pursuit of hermeneutic phenomenology, which underpins the science of interpreting human meaning and experiences (Polit & Beck 2012:497). In the following discussions, language, Heidegger understanding of “being in the world” are discussed in relation to the findings.

5.4.1 Understanding and Heidegger’s being-in-the-world

Heidegger’s and Gadamer’s view of understanding is that all understanding is the individual’s mode of being (Holroyd 2015:4). Being is the state of existing as nurse managers in this study in the different sub-districts expected to schedule training activities, meetings and district reviews which meant being-in-the-world was existing in the world which was their work place (Cambridge Advanced Learner’s Dictionary 2010 sv “context”). Being-in-the-world or embodiment was according to Polit and Beck (2012:267), as implied in this study, a concept that acknowledges nurse managers’ physical ties to their work, patients and performance in relation to implementing the collaborative TB/HIV program. The world and the existence of nurse managers in their world (work environment) created a shared understanding between the researcher and participants during the interviews through language which opened access to

meaningful dialogue (Holroyd 2015:5). Without language the researcher could not understand and interpret the participants' descriptions of the phenomenon. Being-in-the-world was studied by Heidegger to broaden hermeneutics (Reiners 2012:1). Hermeneutics is a philosophical approach that enabled the researcher to understand the phenomenon in this study (Holroyd 2015:11). The researcher's interaction with participants aiming at understanding their experiences was influenced by the management culture to which she belonged to because individuals construct reality in different ways (Creasia & Parker 2007:197). The researcher believed that the reality about contracting and doing performance reviews existed in the minds of the participants and its understanding was facilitated by the fusion of the researcher's familiarity with the participants' life world or work environment, the latter being the participants' experiences of implementation of the collaborative TB/HIV activities and the former being researcher's views of it (Holroyd 2015:5). To reach conclusions, the participants' responses fused with the researcher's interpretation of the text through the process termed by Heidegger as fusion of horizons (Holloway & Wheeler 2010:228). Therefore, the ensuing discussions used the management language as guided by Heidegger on how participants expressed themselves and attached meaning to them.

5.4.2 Implementation of the collaborative TB/HIV activities.

The collaborative TB/HIV activities were recommended by the WHO (WHO 2012:10) to address the interface of the TB and HIV epidemics and be carried out as part of the health sector response to HIV/AIDS by all key stake holders of which nurse managers were part (WHO 2012:10). The WHO (WHO 2012:10) developed and communicated the policy guideline to all countries. The policy guideline was communicated to be adopted by all member states and SA was included in 2004. The rationale for implementing the collaborative TB/HIV activities was outlined in chapter 2 section. Findings on theme one focused on the training of the nurse managers on the training on treatment protocols for TB/HIV co-infected TB/HIV patients. Almost all the participants agreed on the benefits of being trained the WHO notational guidelines adopted in context. The majority of the participants reported positive experiences as one of them expressed it as follows: *"So the good part is that, the department itself takes responsibility in ensuring that the personnel are trained in HIV and also in TB"* (P08 MM). Experience is defined as the knowledge and skill that one has gained

through doing something for a period of time (Oxford Advanced Learners Dictionary 2010, sv “experience”). As a phenomenology study that focused on the experiences of nurse managers as to their experience in regard to the implementation of the TB/HIV program and how they interpreted and put meaning to those experiences as demonstrated in the meaning units (Polit & Beck 2012:737).

Discussions about training of staff members gave a background to introduce content and benefits of the training that enhanced implementation of collaborative TB/HIV activities. One participant mentioned also that ...*“when I say exciting, we got lot of information, we have been trained on all HIV treatment on national guidelines of which they assist us with the rendering of quality service”* (P10 OM).

5.4.3 The barriers that hinder the nurse managers to implement the collaborative TB/HIV activities at management level.

5.4.3.1 Shortage of resources

Nursing is experiencing a huge crisis of human and material shortages globally which results in deterioration of quality patient care, nurses’ interest in caring for the sick especially those suffering from TB/HIV and quality of service delivery (Chehab et al 2013:13).

This study revealed that shortage of human resources particularly nurse managers as the costly category for training, is regarded as the most important barrier in implementing integrated services. Human resources barriers included high patient workload, high rate of attrition and low production of nurses. Shortage of staff in some facilities was aggravated by staff rotation and demand of nurses to attend trainings that were concurrently planned. Chimatira (2012:49) echoed and reported shortage of health care workers that it increases the workload of the staff providing TB and HIV services, because of high patient flow. This concurs with one of the participants who said that: *“the other thing is the shortage of staff, because we don’t have many nurse because some attend trainings others retired and production of nurses is slow, we have got a lot of the patients with little staff is difficult to manage patients fully in one consultation room”* (P14 OM).

Patient's workload limited the health workers to implement the program as guided by the WHO (2012:10) national guidelines. Similar findings from Nansera et al (2010:316) and Legido-Quigley (2012:9) support that high staff turnover and staff already overburdened contributes to staff not coordinating activities particularly perceived as extra work. Seeling et al (2014:272) confirm that staff shortage emanates from attrition or rotation and is perceived as a major challenge in delivery and as the key barrier to ART for TB/HIV patients. Short and McDonald (2012:5) argue that staff shortage is a world-wide challenge resulting from global mobility of health professionals from Australia, Canada, United States and United Kingdom have long been experiencing this challenge (Short and McDonalds 2012:7) and South Africa is not excluded (Uwimana et al 2012:662).

There is insufficient funding for TB program trainings as compared to HIV that is well funded as reported by the participants. The HIV program receives funding from multiple external donors, and these funds are fenced with no flexibility of using them for other activities. These findings were confirmed by Wyne, Richter, Banura and Kipp (2014:10) who reported that funding is allocated for TB programs is not adequate and often not directed at the right health challenges. Uwimana et al (2012:662) concurs with the study finding that funding for TB and HIV program has been uneven, and that contributed to lack of interest from managers for implementation of collaborative TB/HIV activities.

5.4.3.2 *Lack of support by management*

The findings revealed that participants experienced suboptimal support from management which could be perceived that support from management is not displayed the same or equally. However, inadequate support contributed to poor implementation of collaborative TB/HIV activities with negative consequences on the health outcomes. Lack of support by management exposed implementers of the program to unendurable frustrations and demotivation. Tibandebage, Kida, Makintosh and Ikingura (2015:389) indicate that in their study there were nurses who experienced support from management and others did not. The staff experienced not only frustrations and constraints, but less congruence between managers and the working culture in the environment. A similar study by Nikfam et al (2017:3) agrees that

reduced managerial support causes nurses to feel ignored and fail in their task to provide integrated care in this regard

5.4.3.3 *Poor planning*

Poor planning contributed to the power struggles that are prevailing at all levels of implementation among the nurse managers. The power struggles contributed to challenges related to poor communication which leads to nurse managers not sharing information thus hindering good planning for the program. The study further revealed that poor planning of trainings and meetings create problems by duplicating activities as nurses are invited to attend such activities simultaneously. Legido-Quigley et al (2012: 8) support that poor communication lead to failure to share information while implementing the integration. Seeling et al (2014:271) confirms that lack of joint planning of workshops between TB and HIV managers is a barrier. However, Uwimana et al (2012:661) contend that lack of joint planning of activities at provincial and district levels are aggravated by workload and pressure to meet targets.

5.4.3.4 *Patient related challenges*

Nurse managers experience various difficulties during implementation of the collaborative TB/HIV activities as it was identified in the study. Some of the difficulties emanates from patients' lack of cooperation with health care providers. These are expressed through patients providing incorrect identifying information, defaulting treatment and self-referrals to the different facilities without communicating their movement. Ali and Prins (2016:4) confirms with the study findings that patients who default treatment are the ones who gave wrong addresses and migrating from one place to another or from one care provider to the other especially traditional healers. Denegetu (2012: 172) adds that patients disappeared during their course of treatment and care, of which, most of the time, defaulter tracing mechanisms were either ill equipped or non-existent. Since this study did not explore the rationale for lack of cooperation, the study findings by Finlay et al (2012:17) somewhat identified that patients that are mobile are related to defaulter of treatment. Carlsson et al (2014:7) add that indiscipline among patients was described as a reason for default or incorrect treatment. The findings of Carlsson et al (2014:7) & Finlay et al (2012:17) account to participants' lack of co-operation and non-adherence to treatment.

Disclosure and non-disclosure

This study perceived that the pronouncement of HIV initially had a negative impact towards disclosure for continuity of care, particularly to patients who were diagnosed with TB then contracted HIV. Patients who openly disclosed their status benefited from the program, contrary to patients who did not disclose and made it difficult for the nurse managers to implement collaborative TB/HIV activities. Daftary and Padayatchi (2013: 5) inform the scholars community that HIV positive patients shared varying degrees of their status with various health care providers where necessary for their overall care, while others would conceal their sero-status from some health care providers for their personal reasons.

5.5 LIMITATIONS AND SCOPE OF THE STUDY

The study used a qualitative design and purposive sample which limits the representation of the population. Selection bias may have occurred from the recruitment process because the participants work with the researcher as their senior. It was difficult to get participant in one area due to the diversity of the district, however, the first interview session took place in a lodge where participant was attending a district review meeting. Interviews were conducted from 16:00-20:30 this could have affected the quality of the participants' responses as they were tired. The study findings could not provide conclusive evidence to the experiences of nurse managers of the entire district as only fourteen nurse managers were interviewed. The sample size therefore was small and the findings cannot be applicable to the wider community.

5.6 DISSEMINATION OF FINDINGS

The copy of the research report will be available to the gate keeper of the Mopani district, with the possibility of communicating the findings to the sub-district through in-service education, presenting findings in workshops, orientation and training new nurse managers on the content and road shows. Writing of research papers for publication in credible journals will be undertaken as well as possible presentation of this paper at relevant nursing conferences, seminars and TB and HIV national conferences (Polit & Beck 2012: 167-171).

5.7 IMPLICATIONS

Based on the findings, the following implications were made in relation to nursing practice, management, education, research and community nursing.

Nursing practice

The researcher recommends that nursing practice be enhanced by:

- Encourage joint planning and coordination of trainings at all levels of management to strengthen implementation of collaborative TB/HIV activities
- Disseminating disclosure model trainings and manuals that will capacitate nurse managers with updated guidelines to enhance disclosure in TB/HIV co-infected patients.
- Ensuring that nurse managers maintain the privacy and confidentiality of the patients for maximum adherence and compliance of patients on their follow-up care.
- Conducting debriefing sessions for nurses at least once in a quarter to alleviate high patient work load stress related.
- Conducting TB/HIV in-service training to nurse managers so that they can supervise the implementers effectively.
- Encouraging team spirit through meetings, team building initiatives and value clarification workshops.
- Developing policy document to normalize TB and HIV as chronic diseases.

Nursing management

In terms of nursing management, the following is highly recommended:

- Provide continuous support in form of supervision
- Establish patient unique identifier system that is national linked to all facilities. The system will identify patients who are self-referring from one facility to the other and track them back to their facilities to enhance continuity of care.
- Develop integrated TB/HIV policy guidelines and training manual to strengthen implementation of the collaborative TB/HIV activities and to avoid giving conflicting information.

- Establish a mechanism to allocate TB activities to HIV funding to ensure equity in distribution of resources.

Education

- The nurse educators should be capacitated on emerging updated information related to TB and HIV for curriculum revision, so that they can educate students' nurses with relevant information.
- The content of integrated TB/HIV activities should be included in the curriculum of nurses to equip them with the knowledge relating to TB and HIV issues.
- Continuous training, conducting workshop, monitoring and evaluation activities should be implemented according to national guidelines.

Community

- Involvement of all key community stakeholders with regard to collaborative TB/HIV activities through community dialogue, Imbizo and seminars related to collaborative TB/HIV activities. This will alleviate the issues related to stigma, discrimination and enhance disclosure.
- Establishing community TB/HIV prevention, care, treatment support groups strengthen effective utilisation of TB/HIV care services

Research

- Future studies may replicate this study using mixed method and focus group for data collection.
- Larger representative of the samples can be used and more than one institution can be used especially through quantitative studies and larger population samples.
- The implementation status of collaborative TB/HIV activities, focusing on outcome and impact assessment on patients' quality of life following enrolled at TB/HIV care clinics so that policymakers, implementers of the activities can use them for better implementation strategies.
- Future research is recommended to determine patient's factors related to disclosure and non-disclosure in relation to TB/HIV co-infection.

5.8 CONCLUSION

This chapter outlined the discussions in relation to the identified themes, limitations and scope, recommendations and implications based on the findings. Findings were validated with literature control using relevant sources. the first and the second objectives where achieved based on the generated themes which were implementation of the collaborative TB/HIV activities and barriers related to the study construct.

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ANNEXURE: B

3144/13 Begonia Street

Florapark

Tzaneen

0850

Date 01.09.2017

The Ethics Committee Chairperson

Department of Health

Private Bag x9302

Polokwane

Limpopo Province

0700

RE: APPLICATION FOR PERMISSION TO COLLECT DATA FOR RESEARCH

I am a student at the University of South Africa (UNISA 7635389) studying for MA Nursing Science. The research study seeks to explore and describe the experiences of nurse managers relating to the implementation of collaborative TB/HIV activities in Mopani District-Limpopo Province. The participants will be selected from Mopani district office and five sub-district offices and facilities (Ba-Phalaborwa, Greater Giyani, Greater Letaba, Greater Tzaneen and Maruleng PHC offices). Data will be collected through in-depth unstructured interview.

The study recommendations based on the findings will be made available to guide nurse managers to implement the National Department of Health TB/HIV policies and guidelines for the improvement of service delivery. The study will contribute to the existing body of nursing knowledge and other nursing scholars will be able to draw from this study for further hypothesis development and advanced research.

The study may also be replicated or a different paradigm be used to explore the phenomena as an ongoing process. Please find attached a copy of the research proposal with the ethical clearance certificate and consent form for your perusal.

Researcher: Mrs. Mazibuko Josephine: 7635389@mylife.unisa.ac.za and josephinezibu@yahoo.com (076 860 5847)

Supervisor: Prof LV Monareng monarlv@unisa.ac.za (012-4296059)

Chair person of Ethics committee: Prof Maritz maritjie@unisa.ac.za

ANNEXURE D: Informed Consent Form

Research Title: Experiences of nurse managers on the implementation of collaborative TB/HIV activities at management level: Mopani district Limpopo Province.

Institution: University of South African (UNISA)

Department of Health Studies

Researcher: Mrs J Mazibuko

Supervisor: Prof. L.V. Monareng

Dear participant

The purpose of this study is to establish the experiences of nurse managers in relation to the implementation of the collaborative TB/HIV activities in Mopani district, Limpopo province.

You are being asked for information about your experiences in relation to the implementation of the collaborative TB/HIV activities by completing a self-administered questionnaire for your demographic information and be interviewed about the study phenomenon. I ask for your permission to tape record the interview.

You are assured that any information you share on the tape recorder will remain strictly confidential and the contents will only be discussed between the researcher and her supervisor and will be kept under lock and key in a secure place.

There are no risks involved in this study, but you are free to withdraw from the study at any stage if you feel uncomfortable. A counsellor will be available during data collection to refer you to

There will be no monetary compensation for your participation in the study.

I understood that I am being asked to participate in the above mentioned study. I realise that I cannot participate in this study if I am younger than 18years.

I realise that my participation in this study is entirely voluntary and I may withdraw from this study at any time I wish without penalty and that minimum risk is expected from my participation in this study.

The study has been explained to me. I have read and understand this consent form, all of my questions have been answered and I agree to participate in the above mentioned study.

Signature of Respondent Date.....

Signature of Witness Date.....

Signature of Researcher Date.....

ANNEXURE :E

INTERVIEW GUIDE

All information herewith provided will be treated confidentially. It is not necessary to indicate your name or personal information on this interview guide

Research Title: **Experiences of Nurse Managers in relation to the implementation of the collaborative TB/HIV activities at management level in Mopani District: Limpopo Province.**

INSTRUCTIONS

1. Answer all questions on section A by providing an “X” in the box corresponding to the chosen alternative
2. Answer all questions as honestly, objectively as possible
3. Answer according to your own personal opinion, knowledge and experience
4. Hand in the interview guide to the researcher immediately after completion

Answer the question in section A by placing an “X” in the box corresponding to the alternative which is applicable to you
--

SECTION A: DEMOGRAPHIC TOOL

1	Date:			
	Day	Month	Year	
2	What is your gender category?			
	1	Male		
	2	Female		
		Other		

3	What age category do you belong to? <table border="1"> <tr> <td>1</td> <td>30-40</td> <td></td> </tr> <tr> <td>2</td> <td>40-50</td> <td></td> </tr> <tr> <td>3</td> <td>50-60</td> <td></td> </tr> </table>	1	30-40		2	40-50		3	50-60		<div></div>											
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4	Place of work <table border="1"> <tr> <td></td> <td>District</td> <td></td> </tr> <tr> <td></td> <td>Sub-district 1</td> <td></td> </tr> <tr> <td></td> <td>Sub-district 2</td> <td></td> </tr> <tr> <td></td> <td>Sub-district 3</td> <td></td> </tr> <tr> <td></td> <td>Sub-district 4</td> <td></td> </tr> <tr> <td></td> <td>Sub-district 5</td> <td></td> </tr> </table>		District			Sub-district 1			Sub-district 2			Sub-district 3			Sub-district 4			Sub-district 5				
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5	What is your highest professional qualification? <table border="1"> <tr> <td>1</td> <td></td> <td>Diploma in general nursing</td> <td></td> </tr> <tr> <td>2</td> <td></td> <td>BA Cur</td> <td></td> </tr> <tr> <td>3</td> <td></td> <td>Honours degree</td> <td></td> </tr> <tr> <td>4</td> <td></td> <td>Masters in Nursing</td> <td></td> </tr> <tr> <td>5</td> <td></td> <td>Other</td> <td></td> </tr> </table>	1		Diploma in general nursing		2		BA Cur		3		Honours degree		4		Masters in Nursing		5		Other		
1		Diploma in general nursing																				
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3		Honours degree																				
4		Masters in Nursing																				
5		Other																				
6	How many years have you been appointed in this current position as a nurse manager? <table border="1"> <tr> <td>1</td> <td>2-3 years</td> <td></td> </tr> <tr> <td>2</td> <td>3-4 years</td> <td></td> </tr> <tr> <td>3</td> <td>4-5 years</td> <td></td> </tr> <tr> <td>4</td> <td>above 5 years</td> <td></td> </tr> </table>	1	2-3 years		2	3-4 years		3	4-5 years		4	above 5 years		<div></div>								
1	2-3 years																					
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7	What courses related to HIV and TB did you attend? <table border="1"> <tr> <td>1</td> <td>10 days HCT</td> <td></td> </tr> <tr> <td>2</td> <td>PMTCT</td> <td></td> </tr> <tr> <td>3</td> <td>TB/HIV integrated</td> <td></td> </tr> <tr> <td>4</td> <td>NIMART</td> <td></td> </tr> <tr> <td>5</td> <td>TB</td> <td></td> </tr> </table>	1	10 days HCT		2	PMTCT		3	TB/HIV integrated		4	NIMART		5	TB		<div></div>					
1	10 days HCT																					
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3	TB/HIV integrated																					
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5	TB																					
8	How long have you been implementing collaborative TB/HIV activities?																					

		2-4			
		5-6			
		7 and above			

SECTION B

Answers will be audio recorded and the researcher will take notes where necessary

The Grand tour unstructured in-depth individual interview question will be posed to nurse managers as follows:

“Please tell me “What are your experiences as a nurse manager in relation to the implementation of the collaborative TB/HIV activities at management level?

Probe questions will be guided by the participants' response

- Tell me more about your experiences
- Would you give me an example?
- May you elaborate on that idea?
- Is there anything else that you want to add

Researcher: Mrs Mazibuko Josephine

Email: 7635389@mylife.unisa.ac.za and josephinezibu@yahoo.com (076 860 5847)

Supervisor: Prof LV Monareng monarlv@unisa.ac.za (012-4296059)

Chair person of Ethics committee: Prof Maritz maritjie@unisa.ac.za

I THANK YOU FOR YOUR PARTICIPATION IN THIS STUDY

ANNEXURE: F

Transcript for: Participant (03 MM)

Female

Working at Greater sub-district 3

Venue: Boardroom: Length of session:

Researcher: Good afternoon mam

Participant: Morning

Researcher: How are you feeling this afternoon after a long day

Participant: oh! Fine just had a busy day

Researcher: Okay, it is my pleasure to acknowledge your time to come and participant in this study. So I gave you the information leaflet related to the study to read and the consent form and the demographic tool to fill, Did you read?

Participant: Yes I did and is interesting and I signed the form and filled the tool for my details

Researcher: thank you, Okay remember I am conducting a research study with Unisa with the topic as indicated on the leaflet; the topic is experiences of nurse managers in relation to the implementation of the collaborative TB/HIV activities at management level. Your participation and contributions will enable me to to understand the experiences of the nurse managers. I will be asking you a broad question and will ask more information for clarity during the discussion. Is it okay with you?

Participant: Yes I'm fine:

Researcher: my question is "what are your experiences as a nurse manager in relation to the implementation of the collaborative TB/HIV activities at management level? Remember I indicated that I am going to record your information on a tape recorder and the information will only be shared to my supervisor. So I am asking your permission to record you as I might miss some of your valid information. Is it okay with you?

Participant: yes you are welcome to record, yes

Researcher: Thanks, may I also request you to put your phone on silence or to switch off, so that we may not be disturbed.

Participant: Laughing, I will switch it off

Researcher: You are welcome to have you drink in between the session, relax can we start?

Participant: Yes

Researcher	I would like you to tell me your experiences as a nurse manager in relation to the implementation of the collaborative TB/HIV activities
Participant	<p>Okay, I work at the sub-district as the TB coordinator together with the HIV coordinator, supervised by the PHC manager at the sub-district.</p> <p>So with regard to planning for the TB/HIV collaborative activities we do plan together for most of our activities, trying to implement the collaborative TB/HIV activities. For example, we plan together for trainings and all other activities around the two programs. Yes, I say we trying because we have different plans as we are reporting to different managers at the district office.</p> <p>That is why it is so difficult for me as a person, like we will plan together to do this kind of an activity only to find that at the end of the day we are unable to fulfil what we have planned. Because of the competing activities, maybe something come in from my program side or something come in from her program side and disrupt the plan.</p> <p>So obviously I end up being frustrated because I'm unable to fulfil what I planned for yes.</p>
Researcher	May you please tell me more of your experiences as you arrange the trainings for collaborative TB/HIV activities?
Participant	<p>Okay, with regard to trainings the TB and HIV managers at district plan the trainings and send invites to us as TB and HIV coordinators. However, there is no specific unit that deal with TB/HIV collaboration as a program.</p> <p>So if there is TB training, it becomes a problem to discuss HIV issues during my trainings because our training manuals have more information related to TB and also our TB guidelines they also have TB information only a small porting of TB/HIV co-infected patient is discussed.</p> <p>The other thing is that HIV program is funded by conditional grant and they have enough budget, with us, TB program we are funded from equitable fund so we do not have much funds so we TB coordinators we do our trainings ourselves.</p> <p>We always train professional nurses for TB/HIV collaboration, and lay counsellors are rarely trained because we have limited resources.</p> <p>So for collaboration I will need assistance in terms of HIV from the HIV coordinator who will talk deeply on HIV issues, like the new developments. As I may out dated, and she needs to be there so that right information goes to the right people. So if she is not there is the problem. I may end up doing what is wrong or which will be out dated</p>

	<p>because you I'm always alone for the rest of maybe five days or three days.</p> <p>It is sad that most of the time she is not available to assist during the trainings yes.</p>
Researcher	Tell more of your experiences in relation to the implementation of collaborative TB/HIV activities at the sub-district level?
Participant	<p>Uhm, I think I don't have a great support (showing very much concern) from management at the sub-district level, is like I'm working alone and that demotivate me.</p> <p>When there are activities that require me to invite facility nurses for trainings for instance, I'm told that there is shortage of personnel, they cannot release them. But if there are trainings for HIV program the nurses are released. And with regard to planning for meetings it is challenging I feel I'm not supported</p>
Researcher	Okay! How does this affect you?
Participant	As a person I just feel frustrated and demotivated.
Researcher	Is there anything else you want to add to your experiences related to implementation of the collaborative TB /HIV activities at management level?
Participant	<p>We still have this traditional thinking (laughing) of having TB manager thereee, and the HIV manager thereee, it is dragging us back we fail to integrate because of this.</p> <p>The other thing that I experienced, is that even at the facility level patients who are co-infected with TB and HIV are still treated as not as individual, but they are treated as conditions. For example, in some facilities, you find a blue folder for TB on the other side and ART folder on the other side. And yet nurses are trained on Collaborative TB/HIV activities.</p> <p>And it creates problems because you may find the very same patient coming for TB treatment every time but on ART site he or she has defaulted treatment. I think we are trying to correct it by saying especially now that we are dealing with an ideal clinic which is a good strategy, that stresses that one patient must have one folder. So if this strategy can be implemented patient will not be missed. So we have started with some of the facilities and then by the end of next year we hope will be done with implementation of the ideal clinic strategy. We are getting there with integration.</p>
Researcher	What are your feelings when you conduct supervision at the facility and find that patients are not treated as individuals?
Participant	Eish it makes me feel hopeless. Because you know that you trained the nurses to manage the co-infected patients, but they still do wrong things, it is really frustrating.
Researcher	Can you tell me what might be the reason for the nurses to do that?
Participant	Uhm, from what they say most of them feel that we are bringing a lot of work to them. And yet they experience shortage of personnel at the facilities and there are new programs every day.

	They think we bring new strategies but things have been there all alone I mean treating a person in one room is an ideal thing which I think everybody should have been practising it. So the nurses think is a new thing we are creating a new work for them.
Researcher	Please explain more your experiences
Participant	I think if the management can be trained on TB/HIV collaborative activities, they will understand the program and maybe they will have interest and support both programs equally. So if maybe we can have a way of having the monthly management meetings will assist yes. And then see how we perform and come up with plans together and then we can move forward not as TB and HIV program respectively but as PHC managers so that we can be able to manage as team at the sub-district level.
Researcher	Thank you for your responses. Is there anything else that you want to add to your experiences?
Participant	Uhm, yes, my experiences, that I have seen is that all patients that are HIV positive are screened for TB and those without symptoms for TB are initiated on IPT and most of them do not have develop TB those that are having TB are counselled and tested for HIV and if tested HIV positive they initiate them on ART as guided by guidelines. The other thing is that those who are co-infected are at least initiated on ART and attached to DOT supporters uhm but we also have patients who do not want to be attached on DOT supporters because they say they tell people about their HIV status. So this are my experiences so far.
Researcher	Okay thanks so much for participating in the study
Participant	Thank you.

ANNEXURE G: Letter from co-coder

Qualitative data analysis

MASTER OF NURSING SCIENCE
IN THE
FACULTY OF HEALTH STUDIES
Ms J Mazibuko

THIS IS TO CERTIFY THAT:

Prof Tebogo Maria Mothiba has co-coded the following qualitative data:

One-to-one unstructured interviews data

For the study:

Experiences of nurse managers relating to the implementation of the collaborative TB/HIV activities at management level in Mopani District: Limpopo Province

I declare that the candidate and I have reached consensus on the major themes reflected by the data during a consensus discussion meeting. I further declare that adequate data saturation was achieved as evidenced by repeating themes.

Prof TM Mothiba



TM Mothiba (PhD)